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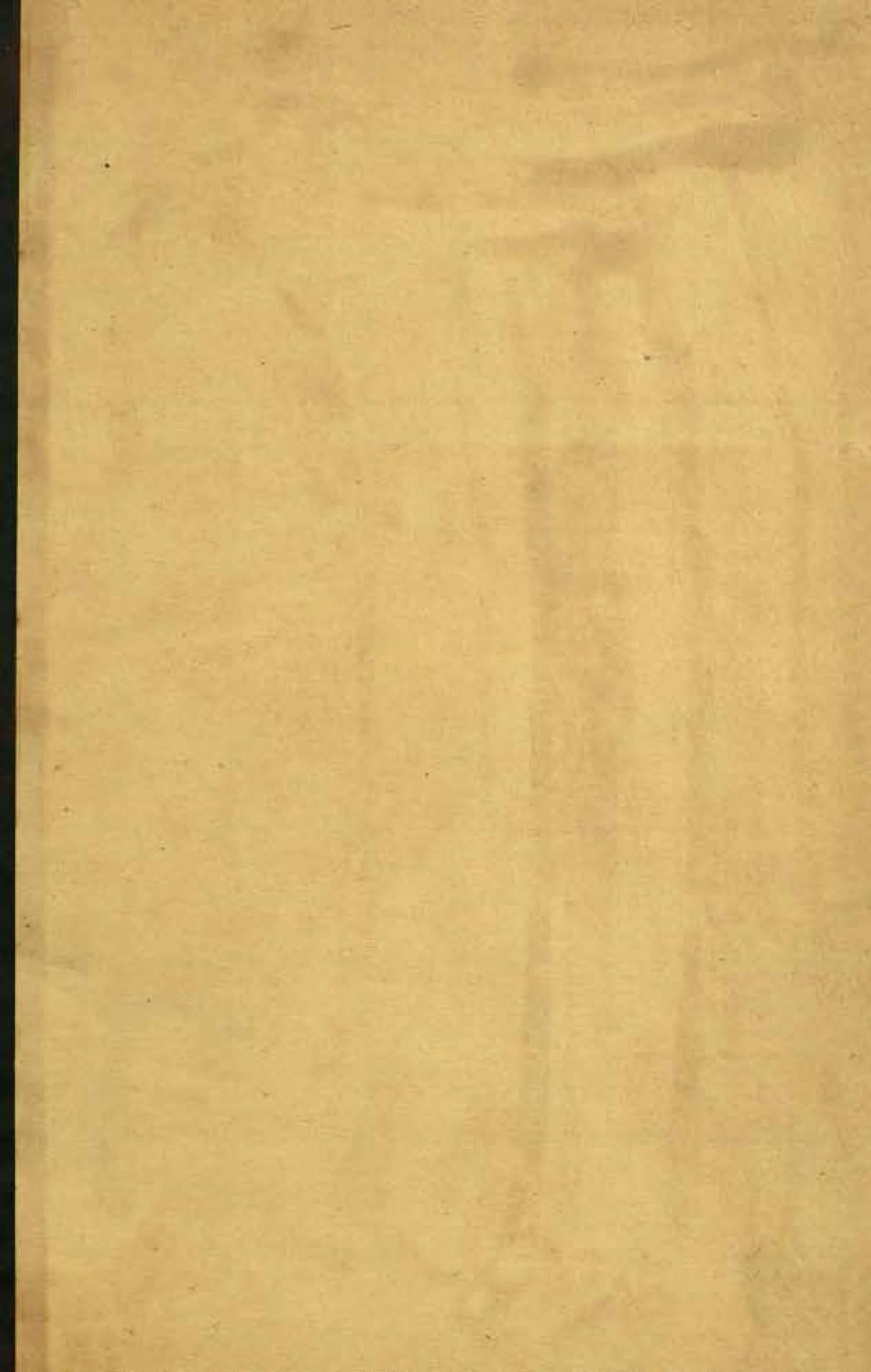
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1864 Brabrook, Sir E. W., C.B., F.S.A., F.R.S.N.A. Copenhagen, PAST PRESIDENT (1895-98); Foreign Associate Anthropol. Soc., Paris; *Langham House, Wallington, Surrey.* (¶§)  
1910 Bramley, Percy B., Esq., Kaiser-i-Hind Gold Medal 1st Class, c/o *Thos. Cook and Sons, Ludgate Circus, E.C. 4.*  
1913 Brauholtz, H. J., Esq., *Gostar, Adams Road, Cambridge.*  
1913 Bray, Denys, Esq., *Quetta, India.*  
1913 Breisford, V., Esq., *Gloucester Road, Chesterfield.*  
1900 Breton, Miss A. C., c/o *Lloyd's Bank, Bath; 15 Camden Crescent, Bath.* (¶)  
1908 Breuil, L'Abbé H., 110 *Rue Demours, Paris.*  
1909 Broad, W. H., Esq., M.D., 64 *Rodney Street, Liverpool.*  
1909 Brown, A. R., Esq., M.A., *Nukuafafa, Tonga.*  
1906 Brown, R. Grant, Esq., *East India United Service Club, St. James's Square, S.W. 1; 3 Park Place, St. James's, S.W. 1.* (¶)  
1909 Brown, W., Esq., M.A., D.Sc., *Psychological Laboratory, King's College, London.*  
1912 Browne, Major G. St. J. Orde, R.A., *Political Officer, Liridi, East Africa.*  
1885 Browne, John, Esq., *Birchwood, 36 Parkhill Road, Croydon, Surrey.*  
1913 Brunton, Guy, Esq., 2 *Regent's Court, Park Road, N.W. 1.*  
1902 Bryce, T. H., Esq., M.D., Regius Professor of Anatomy in the University of Glasgow, *The University, Glasgow.* (¶)  
1913 Buddle, Roger, Esq., 14 *Glazebury Road, West Kensington, W. 14.*  
1910 Burne, Miss C. S., 5 *Iverna Gardens, Kensington, W. 8.*

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- 1913 Burrows, Arthur, Esq., 3 *Buckingham Crescent, Victoria Road, Manchester.*  
 1903 Burry, Miss B. Pullen-, *Lyceum Club, Piccadilly, W.1.* (\*)  
 1906 Bushnell, David L., Esq., Junr., *The University, Virginia, U.S.A.* (\*\*)  
 1913 Buxton, L. H. Dudley, Esq., 6 *St. John's Road, Oxford.* (\*)
- 1913 Campbell, Dugald, Esq., *Garcinganzi's Mission, Chilubula, near Lake Bangweolo, N. Rhodesia; Newlands Drive, Partick, Scotland.*  
 1904 Campbell, Harry, Esq., M.D., 23 *Wimpole Street, W.1.*  
 1915 Capen, E. W., Esq., Ph.D., *Kennedy School of Missions, Hartford, Conn., U.S.A.*  
 1912 Carline, G. R., Esq., 47 *Downshire Hill, Hampstead, N.W. 3.*  
 1913 Carr-Saunders, A. M., Esq., *Milton Heath, Dorking.*  
 1915 Chinnery, E. W. P., Esq., *Kokoda, Kumusi Division, Papua.*  
 1909 Cholmeley, E. H., Esq., B.A., *Solwezi, N.E. Rhodesia.*  
 1917 Cholmeley, Major R. S., 3/4 *K.A. Rifles, c/o Postmaster, Mombasa, B.E.A.*  
 1913 Christy, Miller, Esq., F.L.S., *Broomicood Lodge, Chignol St. James, Chelmsford.*  
 1874 Church, Sir William Selby, Bart., K.C.B., M.D., D.Sc., Ex-President R.C.P.  
*Woodside Place, Hatfield, Herts.*  
 1912 Churchill, W., Esq., *Yale Club, 30 West Forty-fourth Street, New York, U.S.A.*  
 1877 Clapham, Crochley, Esq., M.D., *The Gables, Mayfield, Sussex.* (\*\*)  
 1911 Clark, Major J. Cooper, *Station Hotel, Elgin; 2/6 Devon Regiment, Mesopotamian Expeditionary Force "D."*  
 1914 Clark, W. E. Le Gros, Esq., *St. Thomas's Hospital, Westminster Bridge Road, S.E. 1.*  
 1909 Clarke, H. E., Esq., c/o *Bankvereine Suisse, Lausanne, Switzerland.*  
 1913 Clarke, Louis C. G., Esq., *Berkeley House, Hay Hill, W.* (§)  
 1895 Cloddy, Edward, Esq., *Strafford House, Aldeburgh, Suffolk.*  
 1863 Collingwood, J. Frederick, Esq., F.G.S., Foreign Assoc., Anthropol. Soc., Paris,  
*8 Oakley Road, Canonbury, N.* (\*\*)  
 1888 Collyer, Henry C., Esq., *The Grange, Seaton, South Devon.*  
 1913 Coltart, Captain A. H., *Kensington Palace Mansions, de Vere Gardens, W. 8.*  
 1907 Colvile, Ernest F., Esq., *The Residency, Port Herald, Nyassaland Protectorate; New University Club, S.W.*  
 1895 Corner, Frank, Esq., M.R.C.S., *Manor House, Poplar, E.* (¶)  
 1911 Coxhead, J. C. C., Esq., *Livingstone, N. Rhodesia.* (¶)  
 1912 Crawford, D., Esq., *Lounza Mission Station, Elizabethville, Congo Belgie, Africa.*  
 1907 Crewdson, W., Esq., M.A., J.P., F.S.A., *Southside, St. Leonards-on-Sea.* (¶)  
 1893 Crombie, James Edward, Esq., *Parkhill House, Dyce, Aberdeen.* (¶)  
 1892 Crooke, William, Esq., B.A., *Langton House, Charlton Kings, Cheltenham.* (¶)  
 1913 Cross, Mrs. E., "Wayside," *Pleasington, Lanes.*  
 1900 Crowfoot, J. W., Esq., M.A., *Ministry of Education, Cairo.* (¶)  
 1911 Cruickshank, J. G., Esq., *Audit Dept., British Guiana.*

Year of  
Election.

- 1903 Cummins, Lt.-Col. S. L., R.A.M.C., *Cullompton, Highfields, Ashtead, Surrey.* (†)
- 1896 Cust, Miss M. E. V., F.R.G.S., *Twyford House, Fishpool Street, St. Albans.*
- 1914 Czaplicka, Miss Mary A., *Lady Margaret Hall, Oxford.*
- 1911 Czekanowski, Dr. Jan, *Imperial Academy of Science, Petrograd.*
- 1895 Dalton, Ormonde Maddock, Esq., M.A., F.S.A., Corr. Mem. Soc. d'Anthrop.  
*Paris, British Museum, Bloomsbury, W.C.* (\*\*\$)
- 1902 Dames, M. Longworth, Esq., VICE-PRESIDENT, *Orielmead, Edgeborough Road,  
Guildford.* (†\$)
- 1902 Daniels, Major W. Cooke (U.S.A. Army), c/o *Messrs. Brown, Shipley & Co.,  
123 Pall Mall, S.W. ; Chateau de la Motte, Sonzay, Indre-et-Loire, France.*
- 1893 Davies, Rev. Prof. T. Witton, B.A. (Lond.), Ph.D. (Leipzig), D.D. (Geneva),  
*University College, Bangor, North Wales.* (\*)
- 1908 Dawkins, R. M., Esq., M.A., *Plas Dulas, Llanddulas, North Wales.*
- 1869 Dawkins, W. Boyd, Esq., M.A., D.Sc., F.R.S., F.S.A., F.G.S., Honorary  
Professor of Geology and Palaeontology in the University of Manchester,  
*Fallowfield House, Fallowfield, Manchester.* (†)
- 1909 Dayrell, E., Esq., District Commissioner, *District Office, S. Nigeria ; Junior  
Army and Navy Club, Whitehall, S.W.* (\*)
- 1904 Dennett, R. E., Esq., *Benin* ; c/o *H. S. King and Co., 9 Pall Mall, S.W. 1.* (†)
- 1912 Derry, Capt. D. E., M.B., Ch.B., R.A.M.C., *The Savage Club, 6 Adelphi Terrace,  
W.C. 2.*
- 1913 Desai, Rao Bahadur Govindlalhai H., *Suba, Nasari, India.*
- 1915 Dickey, H. S., Esq., *Highland Falls, N.Y., U.S.A.*
- 1907 Dixon, A. F., Esq., Sc.D., Professor of Anatomy, *Trinity College, Dublin.* (\*)
- 1908 Dixon, Dr. Roland B., Instructor of Ethnology, *Harvard University,  
Cambridge, Mass., U.S.A.*
- 1909 Dornan, Rev. S. S., *P.O. Box 106, Bulawayo, Rhodesia.* (†)
- 1912 Drew, Captain C. M., R.A.M.C., *28 Albert Place, Stirling.*
- 1915 Driberg, J. H., Esq., *Lira, Lango District, Uganda Protectorate.*
- 1908 Droop, J. P., Esq., M.A., *11 Cleveland Gardens, W. 2.*
- 1899 Duckworth, W. L. H., Esq., M.A., M.D., Sc.D., *Jesus College, Cambridge.* (\*\*\$)
- 1913 Duke, A., Esq., *Bangkok, Siam.*
- 1908 Duke, D., Esq., M.R.C.S., *Great Easton, Uppingham.*
- 1908 Durham, Miss M. Edith, *71 Belsize Park Gardens, N.W. 3.* (†)
- 1911 During, C. D. H., Esq., F.R.G.S., *Ethgrace, 15 Pultney Street, Freetown,  
Sierra Leone.*
- 1901 Durnan, T., Esq., *Worboro' House, Grove Road, Millhouses, Sheffield.*
- 1893 Ebbels, Arthur, Esq., *Tor Cottage, Temple Road, Epsom.*
- 1911 Edwards, Francis, Esq., *Darenham, Northwood, Middlesex.*
- 1906 Edwards, Brig.-General W. F. S., D.S.O., Inspector-General of Police, *Kampala,  
Uganda.*

Year of  
Election.

- 1905 Eliot, Sir Charles, K.C.M.G., C.B., M.A., LLD., Vice-Chancellor of the University of Sheffield, *Endcliffe Holt, Endcliffe Crescent, Sheffield*.  
 1909 Entwistle, Peter, Esq., Assistant Curator, *Mayer Museum, Liverpool*.  
 1907 Ernst, Mrs. Lucy Hoesch, Ph.D., *Villa Hoesch, Godesberg, Germany*.  
 1891 Evans, Sir Arthur J., M.A., LLD., Litt.D., F.R.S., F.B.A., F.S.A.; Professor of Prehistoric Archaeology in the University of Oxford, *Youlbury, Oxford*. (¶)  
 1913 Evans, Oswald H., Esq., F.G.S., *Casilla 46, Valparaiso, Chile*.  
 1916 Evans, I. H. N., Esq., B.A., *Perak Museum, Taiping, Federated Malay States*. (¶)  
 1913 Evans, Major T. J. Carey, I.M.S., c/o *Grindlay, Groom and Co., Bombay, India; Llysmeldya, Blaenau Festiniog, N. Wales*.  
 1903 Fallaize, E. N., Esq., B.A., *Vinchelz, Chase Court Gardens, Enfield*.  
 1900 Farnell, Lewis R., Esq., M.A., Litt.D., *Exeter College, Oxford*.  
 1911 Faulds, Henry, Esq., L.F.P.S., *Regent House, Regent Road, Hanley, Stoke-on-Trent*.  
 1880 Felkin, Robert William, Esq., M.D., F.R.G.S., *Whare, R.A., Havelock North, New Zealand*.  
 1917 Fell, Rev. J. R., *Native Training Institute, Clizby Estate, Kafue, N. Rhodesia*.  
 1911 Fenton, C., Esq., *21 Mincing Lane, E.C. 3*.  
 1913 Fenton, Capt. E. G., F.R.C.S.I., R.A.M.C., *Sanitary Office, A.P.O., S. 8, B.E.F., France*.  
 1908 Fenwick, N., Esq., Jun., *Eldoret, British East Africa*. (¶)  
 1914 Ferreira, Dr. Antonio Aurelio da Costa, *Belem, Lisbon, Portugal*.  
 1902 Ferrers, Earl, *35 Victoria Road, Kensington, W. 8*.  
 1908 Foulkes, Colonel H. D., R.F.A., Resident, *Punshin, Banchi Province, N. Nigeria; United Empire Club, 107 Piccadilly, W. 1*.  
 1916 Finlay, Capt. Douglas E., M.B., B.Sc. (London), M.R.C.S., L.R.C.P., *Wells Dene, Gloucester; 21 Casualty Clearing Station, B.E.F., France*.  
 1908 Fleure, Professor H. J., D.Sc., *Craig Frym, Buarth Road, Aberystwyth*. (¶§)  
 1885 Frazer, Sir James G., D.C.L., LLD., Litt.D., *1 Brick Court, Middle Temple, E.C. 4*. (¶§)  
 1907 Freire-Marreco, Miss Barbara W., *Potter's Croft, Horsell, Woking*. (¶)  
 1910 Friend-Pereira, J. E., Esq.; c/o *Measrs. King, Hamilton and Co., Calcutta*.  
 1910 Fuller, A. W. F., Esq., *7 Sydenham Hill, S.E. 26*. (\*)  
 1902 Furness, W. H., Esq., M.A., M.D., *Wallingford, Pa., U.S.A.* (\*¶)  
 1910 Garbutt, H. W., Esq., *P.O. Box 181, Bulawayo, Rhodesia*.  
 1901 Gardiner, A. H., Esq., *9 Lansdowne Road, Holland Park, W. 11*.  
 1916 Garfitt, G. A., Esq., *Holmesfield, Sheffield*.  
 1914 Garrad, Barry L., Esq., B.A., *54 Park Road, Westcliff-on-Sea; AA Section, Warlies Park, near Waltham Abbey*.

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- 1913 Garrett, Lt.-Cdr. T. H., *Royal Societies' Club, St. James's Street, S.W.; H.Q. No. 5 Wing, R.N.A.S., c/o Senior Officer, 18 Marine Parade, Dover.*
- 1881 Garson, John George, Esq., M.D., Foreign Assoc., Anthropol. Soc., Paris; Corr. Member Anthropol. Soc., Berlin, Moscow, Rome; *Moorecole, Eversley, Winchfield, Hants. (¶)*
- 1913 Gask, G. E., Esq., F.R.C.S., *41 Devonshire Place, Portland Place, W. 1.*
- 1907 Geddes, Sir A. Campbell, K.C.B., M.D., Ch.B., *Ministry of National Service, Westminster, S.W. 1.*
- 1901 George, E. C. S., Esq., C.I.E., Deputy Commissioner, *Meiktila, Burmah.*
- 1907 Gibson, A. E. M., Esq., Barrister-at-Law, *Dorunkah Chambers, Calabar, S. Nigeria.*
- 1913 Gibson, Herbert, Esq., *Compton Hurst, Eastbourne.*
- 1901 Gladstone, R. J., Esq., M.D., *22 Regent's Park Terrace, N.W. 1. (§)*
- 1915 Glauert, L., Esq., Assistant Curator, *Western Australia Museum, Perth, W. Australia.*
- 1879 Godman, F. Du Cane, Esq., F.R.S., *South Lodge, Horsham. (\*)*
- 1903 Goldney, F. Bennett, Esq., M.P., *Abbot's Barton, Canterbury.*
- 1911 Goodyear, T. C., Esq., "Rothesay," *Plaistow Lane, Bromley, Kent.*
- 1887 Gowland, W., Esq., F.R.S., V.-P.S.A., F.I.C., F.C.S., PAST PRESIDENT (1905–1907), Emeritus Professor of Metallurgy, Royal School of Mines, South Kensington, *13 Russell Road, Kensington, W. 14. (\*¶§)*
- 1905 Graham, W. A., Esq., *Bangkok, Siam; 35 South Eaton Place, S.W. 1.*
- 1888 Greatheed, William, Esq., *67 Chancery Lane, W.C. 2.*
- 1905 Green, F. W., Esq., M.A., *Jesus College, Cambridge.*
- 1899 Griffith, F. Llewellyn, Esq., *11 Norham Gardens, Oxford. (¶)*
- 1913 Grimdsdale, Harold B., Esq., M.B., F.R.C.S., *3 Harley Place, W. 1.*
- 1905 Grist, C. J., Esq., M.A., *The Tiffin's School, Kingston.*
- 1910 Gruning, E. L., Esq., *Hervey Islands, Cook Group, S.E. Pacific, via Rarotonga.*
- 1917 Gunnell, A. Mortimer, Esq., F.R.Met.Soc., *Broomfield Park College, New Southgate, N. 11.*
- 1889 Haddon, Alfred C., Esq., M.A., Sc.D., F.R.S., M.R.I.A., PAST PRESIDENT (1901–1903), Reader in Ethnology in the University of Cambridge, Assoc. Anthropol. Soc. Paris; Corr. Mem. Anthropol. Soc. Berlin, Florence, Rome and Stockholm, *3 Crummier Road, Cambridge. (\*¶§)*
- 1905 Haddon, E. B., Esq., B.A., *Gondokoro, via Khartum. (¶)*
- 1913 Hambly, Wilfrid D., Esq., *15 Lake House Road, Wanstead, N.E.*
- 1911 Hamilton-Grierson, Sir Philip, *7 Palmerston Place, Edinburgh.*
- 1902 Harrison, Alfred C., Esq., *1616 Locust Street, Philadelphia. (\*)*
- 1911 Harrison, C., Esq., *Delkatlu Lodge, Massett, British Columbia.*
- 1904 Harrison, H. S., Esq., D.Sc., SECRETARY, *The Horniman Museum, Forest Hill, S.E.; 8 Gaynesford Road, Forest Hill, S.E. 23. (§)*

Year of  
Election.

- 1897 Hartland, E. S., Esq., F.S.A., *Highgarth, Gloucester.* (\*†§)
- 1905 Hastings, Rev. J., D.D., *Kingsgate, Aberdeen.*
- 1889 Haverfield, F., Esq., M.A., Hon. D.Litt., Hon. LLD., F.B.A., F.S.A., Camden Professor of Ancient History in the University of Oxford, *Winshields, Headington Hill, Oxford.* (\*\*)
- 1902 Haviland, H. A., Esq., M.D., *Normans, Rusper, Sussex.*
- 1905 Hay, Matthew, Esq., M.D., Professor of Forensic Medicine, *The University, Aberdeen.*
- 1913 Haywood, C. W., Esq., *East African Estates, Limited, Gazi, Mombasa, British East Africa.*
- 1885 Heape, C., Esq., *High Lane, near Stockport.*
- 1910 Heimbrod, G., Esq., *P.O. Nadi, Fiji (via Lautoka).*
- 1895 Hickson, Prof. S. J., D.Sc., F.R.S., *The University, Manchester.* (\*)
- 1909 Higgins, H., Esq., *7 St. John's Lane, Liverpool.*
- 1906 Hildburgh, W. L., Esq., M.A., Ph.D., F.S.A., *Queen Anne's Mansions, St. James's Park, S.W. 1.* (¶§)
- 1913 Hill, G. W., Esq., *21 West Hill, Highgate, N.6.*
- 1913 Hill, H. Brian C., Esq., *30th Lancers, c/o Messrs. King, Hamilton and Co., Calcutta, India.*
- 1906 Hilton-Simpson, Melville W., Esq., F.R.G.S., *Sole Street House, Faversham, Kent.*
- 1916 Hitchins, A. B., Esq., A.M., D.Sc., Ph.D., c/o *Ansoo Co. Research Laboratory, Binghamton, N.Y.*
- 1909 Hocart, A. M., Esq., *5 Walton Well Road, Oxford.*
- 1906 Hodson, T. C., Esq., *10 Wood Lane, Highgate, N.6.* (†)
- 1914 Hollobone, Henry E. W., Esq., *25 Sutherland Square, Walworth, S.E. 17.*
- 1910 Holmes, Harold, Esq., *Cherryford-in-Martinhoe, Parracombe, N. Devon.*
- 1881 Holmes, T. V., F.G.S., *28 Croon's Hill, Greenwich, S.E. 10.* (†)
- 1915 Homer, Thomas, Esq., I.R.C.S., L.R.C.P. (Edin.), *S. Rhodesia Medical Service, Rusapi, S. Rhodesia.*
- 1915 Honter, R. F., Esq., Director of Education, *Sierra Leone, W. Africa; Aldermoor, Fareham Road, Bembridge, Isle of Wight.*
- 1913 Hooton, E. A., Esq., Ph.D., *Peabody Museum, Harvard University, Cambridge, Mass., U.S.A.*
- 1915 Hopkins, J., Esq., F.R.C.S., *Hamercot, Esher Avenue Walton-on-Thames.*
- 1918 Hough-Love, Percy R., Esq., *Saham College, Watton, Norfolk.*
- 1896 Howorth, Sir Henry H., K.C.I.E., D.C.L., F.R.S., F.S.A., *45 Lecham Gardens, W. 8.* (†)
- 1879 Hügel, Baron A. von, *Museum of Archaeology and Ethnology, Downing Street, Cambridge.* (†)
- 1912 Hunt, Walter, Esq., *3 Westcote Road, Streatham, S.W. 16.*

Year of  
Election.

- 1898 Hutchinson, Rev. H. Neville, M.A., F.R.G.S., F.G.S., F.Z.S., 17 St. John's Wood Park, Finchley Road, N.W. 8.
- 1912 Hutchinson, W., Esq., B.A., F.R.G.S., F.Z.S., 34-36 Paternoster Row, E.C. 4.
- 1913 Hutton, J. H., Esq., I.C.S., Assistant Commissioner, Mokokchung, Naga Hills, Assam, India.
- 1898 Iles, George, Esq., c/o Public Library, Ottawa, Canada. (\*)
- 1915 Ishii, S., Esq., 33 Abingdon Mansions, Pater Street, Kensington, W. 8.
- 1863 Jackson, Henry, Esq., O.M., Litt.D., M.A., F.B.A., Regius Professor of Greek in the University of Cambridge, Trinity College, Cambridge. (\*)
- 1912 Jackson, H. C., Esq., Sudan Civil Service, Impens, North Petherton, Somerset.
- 1915 James, Rev. Edwin O., St. Peter's Vicarage, Limehouse, E. 14.
- 1872 Jeaffreson, W. J., Esq., M.A. (\*)
- 1869 Jeffery, F. J., Esq. (\*)
- 1913 Jelf, Arthur, Esq., Ipoh, Perak, Federated Malay States.
- 1916 Johnson, H. J. T., Esq., Oak Hurst, near Derby.
- 1885 Johnston, Sir H. H., G.C.M.G., K.C.B., D.Sc., F.Z.S., St. John's Priory, Poling, Arundel. (\*)
- 1901 Johnstone, H. B., Esq., B.A., H.B.M., Vice-Consul, Mogador, Morocco.
- 1914 Jones, Capt. D. Hedog, M.A., B.Sc., c/o Rev. Canon Martin, Kelloe Vicarage, Caxhoe, Co. Durham.
- 1914 Jones, H. Sefton, Esq., 74 Cadogan Place, S.W. 1.
- 1910 Jones, F. W., Esq., School of Medicine for Women, 8 Hunter Street, Brunswick Square, W.C. 1.
- 1917 Jones, Mrs. G. C. Wood, 5 Gloucester Road, N.W. 1.
- 1902 Joyce, Capt. T. A., M.A., O.B.E., SECRETARY, British Museum, W.C.; 151 Dartmouth Road, Cricklewood, N.W. 2. (¶§)
- 1905 Joyce, T. Heath, Esq., The Royal Albert Yacht Club, Southsea.
- 1907 Judge, James J., Esq., 15 Hill Park Crescent, Plymouth.
- 1913 Julian, Mrs. Hester, Redholme, Torquay.
- 1896 Keith, A., Esq., M.D., F.R.C.S., LLD., F.R.S., PAST-PRESIDENT (1913-16), Conservator of the Museum, Royal College of Surgeons; 17 Aubert Park, Highbury, N.5. (¶§)
- 1911 Khan, S. S., Esq., Medical College, Lucknow, India.
- 1911 Kidd, Dr. A. E., 19 Ward Road, Dundee.
- 1911 Kirkpatrick, W., Esq., P.O. Box 46, Calcutta, India; Avondale, Moalfrost Road, Eastbourne.
- 1914 Kittredge, T. B., Esq., University of California, 2606 Bancroft Way, Berkeley, California, U.S.A.
- 1891 Kitts, Eustace John, Esq., Dudley Hotel, Hove, Sussex. (\*)
- 1902 Kloss, Cecil B., Esq., Kuala Lumpur, Federated Malay States.
- 1914 Knight, Lieut.-Col. C. Morley, D.S.O., Naval and Military Club, Piccadilly, W. 1.

Year of  
Election.

- 1909 Knowles, F. H. S., Esq., M.A., *Anthropological Division, Victoria Museum, Ottawa, Canada.*
- 1881 Knowles, W. J., Esq., *Flixton Place, Ballymena, Co. Antrim.* (¶)
- 1914 Laidlaw, George Muir, Esq., M.A., *Pekan, Pahang, Federated Malay States.*
- 1915 Laidler, Capt. P. W., L.D.S., *No. 1 General Hospital, Wynberg, Cape Colony.*
- 1918 Lake, Miss Hilda A., *Heage House, Crouch Hill, N. 4.*
- 1914 Lamb, Miss M. Antonia, *Elmwood Manor, 5900 Elmwood Avenue, Philadelphia, Penn., U.S.A.*
- 1913 Landtmann, Dr. Gunnar, *Malm, Helsingfors, Finland.* (¶)
- 1888 Law, Walter W., Esq., *Scarborough, New York, U.S.A.* (\*)
- 1885 Lawrence, E., Esq., *Kama, Sunningdale Avenue, Chalkwell Park, Leigh-on-Sea, Essex.* (\*)
- 1916 Layard, J. W., Esq., *King's College, Cambridge.*
- 1904 Lennox, D., Esq., M.D., *Tayside House, 162 Nethergate, Dundee.* (\*)
- 1909 Leveson, H. G. A., Esq., M.R.A.S., F.R.G.S., *East India United Service Club, St. James's Square, S.W.; 70, Carlisle Mansions, Carlisle Place, Victoria Street, S.W. 1.*
- 1866 Lewis, A. L., Esq., F.C.A., *Officier d'Académie, 35 Beddington Gardens, Wallington, Surrey.* (\*¶§)
- 1914 Loé, Baron Alfred de, Curator of Department of Prehistoric Antiquities, *Musées Royaux du Cinquantenaire, Brussels, Belgium.*
- 1893 Longman, Charles James, Esq., M.A., *27 Norfolk Square, W. 2.* (\*)
- 1917 Lyle, Miss Margaret Y., *Finnart House, Weybridge, Surrey.*
- 1884 Macalister, Alexander, Esq., M.D., F.R.S., Professor of Anatomy in the University of Cambridge, PAST PRESIDENT (1893-95), *Torrisdale, Cambridge.* (¶§)
- 1901 Mace, A., Esq., *14 Hill Road, St. John's Wood, N.W. 8.*
- 1913 MacGregor, G. Laird, Esq., I.C.S., c/o *Messrs. Grindlay & Co., 84 Parliament Street, S.W. 1.*
- 1899 MacIver, Capt. David Randall-, M.A., D.Sc., F.S.A., F.R.G.S., *131 East 66th Street, New York.*
- 1904 Mackay, J., Esq., *Craig-ard, Farcliffe Road, Bradford.*
- 1910 Mackintosh, J. S., Esq., M.D., *2 Platt's Lane, Hampstead, N.W. 3.*
- 1899 MacLagan, R. C., Esq., M.D., *5 Coates Crescent, Edinburgh.*
- 1908 MacMichael, Capt. H. A., D.S.O., Deputy Inspector, Sudan Civil Service, *Omdurman, Sudan; 11 Parkside, Cambridge.* (¶)
- 1885 MacRitchie, David, Esq., F.S.A. Scot., *4 Archibald Place, Edinburgh.* (¶)
- 1911 Malcolm, L. W. G., Esq., c/o *The Royal Colonial Institute, Northumberland Avenue, W.C. 2.*
- 1910 Malinowski, B., Esq., c/o *Commercial Bank of Australia, 273 George Street, Sydney.* (¶)

Year of  
Election.

- 1881 Man, E. H., Esq., C.I.E., *St. Helen's, Preston Park, Brighton.* (¶)
- 1913 Mann, F. W., Esq., *Devonshire Club, St. James's Street, S.W. 1.*
- 1896 Marett, R. R., Esq., M.A., D.Sc., Reader in Anthropology in the University of Oxford, *Exeter College, Oxford.* (¶¶)
- 1905 Marten, R. H., Esq., M.D., *12 North Terrace, Adelaide, South Australia.*
- 1894 Maudslay, A. P., Esq., M.A., D.Sc., F.S.A., F.R.G.S., PAST PRESIDENT (1911-12), *Morney Cross, Hereford.* (¶§)
- 1912 Maxwell, J. C., Esq., *Owerri, Nigeria, via Port Harcourt.*
- 1911 McConnell, R. E., Esq., B.A., M.D., Uganda Medical Service, *Nimule, Nile Province, Uganda.*
- 1910 McDougall, William, Esq., M.A., *89 Banbury Road, Oxford.* (¶)
- 1913 McLean, W., Esq., M.B., *Seaforth Sanatorium, Conon Bridge, Ross-shire.*
- 1915 Means, P. A., Esq., *196 Beacon Street, Boston, U.S.A.*
- 1915 Mechling, W. H., Esq., *The Bartram, Chestnut and 33rd Street, Philadelphia.*
- 1904 Melland, Frank H., Esq., *Livingstone, Northern Rhodesia.*
- 1916 Meredith, Rev. F. C., F.R.G.S., *966 Torimi Cho, Mito, Ibaraki Ken, Japan.*
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- Edinburgh*... Royal Scottish Geographical Society.
- Royal Society of Edinburgh.
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- Glasgow*... Philosophical Society.
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- London*... African Society.
- British Medical Association.
- British Psychological Society.
- Folklore Society.
- Geologists' Association.
- Hellenic Society.
- Index to Periodicals, Atheneum Office.
- India Office, Whitehall.

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- Nature.
- Palestine Exploration Fund.
- Quatuor Coronati Lodge, No. 2076.
- Royal Archaeological Institute.
- Royal Asiatic Society.
- Royal Colonial Institute.
- Royal Geographical Society.
- Royal Society.
- Royal Society of Literature.
- Royal Statistical Society.
- Royal United Service Institution.
- Science Progress.
- Society of Antiquaries.
- Society of Biblical Archaeology.
- Taunton*... The Somersetshire Archaeological Society.
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- Magyar Nemzeti Néprajzi Ostály.
- Cracow*... Akademija Umiejetnoscí.
- Sarajevo*... Landesmuseum (Wissenschaftliche Mittheilungen aus Bosnien).
- Vienna*... Anthropologische Gesellschaft.
- K. Akademie der Wissenschaften.

BELGIUM.

- Brussels*... Académie Royale des Sciences.
- Collection de Monographies Ethnographiques.
- Institut Solvay.
- Société d'Anthropologie de Bruxelles.
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- Berlin*... Berliner Gesellschaft für Anthropologie, Ethnologie, und Urgeschichte.
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- Leipzig*... Archiv für Religionswissenschaft.
- Archiv für Rassen und Gesellschaft Biologie.

*Leipzig...* Verein für Erdkunde.

— Orientalisches Archiv.

*Munich...* Deutsche Gesellschaft für Anthropologie, Ethnologie, und Urgeschichte.

*Stuttgart...* Zeitschrift für Morphologie und Anthropologie.

GREECE.

*Athens...* Ephemeris Archaiologikē.

— Annual of the British School of Archaeology.

ITALY.

*Florence...* Società Italiana di Antropologia, Etnologia, e Psicologia Comparata.

*Rome...* Accademia dei Lincei.

— Società Romana di Antropologia.

*Turin...* Archivio di Psichiatria.

NETHERLANDS.

*Amsterdam...* Koninklijke Akademie van Wetenschappen.

— Publications of the Kolonial Instituut, Amsterdam.

*Leiden...* Internationales Archiv für Ethnographie.

CAPE COLONY.

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*Transvaal, Johannesburg...* The South African Institute for Medical Research.

ARGENTINE.

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CANADA.

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UNITED STATES.

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*Cambridge, Mass...* Peabody Museum, Science.

*Chicago...* Field Museum.

*The Hague...* Koninklijk Instituut voor de Taal-, Land-, en Volkenkunde van Nederlandsch Indië.

RUSSIA.

*Dorpat...* Publications of the University.

*Helsingfors...* Suomen Muinaismuistoyhdistyksen Arkakanskirja (Journal of the Finnish Archaeological Society).

*Moscow...* Imper. Obschestvo Lubitelei Iestestvoznania, Antropologii, i Etnografii.

*St. Petersburg...* Imper. Akademia Nauk.

SWEDEN.

*Stockholm...* Academy of Antiquities, National Museum.

— Nordiska Museet.

— Ymer.

*Uppsala...* Kungl. Universitetets Bibliotek.

SWITZERLAND.

*Neuchâtel...* Soc. Neuchateloise de Géographie.

*Zurich...* Musée National Suisse.

AFRICA.

EGYPT.

*Giza...* Archaeological Survey of Nubia.

*Khartum...* Wellcome Laboratory Reports.

AMERICA.

*New York...* American Museum of Natural History.

— Columbia University.

*Philadelphia...* University Museum.

*Washington...* American Anthropologist.

— Bureau of Ethnology.

— Smithsonian Institution.

— United States Geological Survey.

— United States National Museum.

*Worcester, Mass...* American Journal of Psychology.

*Lancaster, Pa...* American Folklore Society.

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*Calcutta...* Bengal Asiatic Society.  
*Colombo...* Royal Asiatic Society (Ceylon branch).  
*Ranchi...* Behar and Orissa Research Society.  
*Rangoon...* Burma Research Society.  
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## SIAM.

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*Singapore...* Royal Asiatic Society (Straits Branch).

## EXCHANGES FOR "MAN."

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*Hull...* The Naturalist.  
*Liverpool...* Institute of Tropical Research.  
— Journal of the Gypsy Lore Society.  
*London...* Annals of Psychical Science.  
— British Association.  
— Church Missionary Review.  
— Eugenics Review.  
— Journal of the East India Association.  
— Lancet.  
— Reliquary and Illustrated Archaeologist.  
— Saga-Book of the Viking Club.  
— Science Progress.  
— Sociological Review.  
— South American Missionary Society.

## ARGENTINE.

*La Plata...* Musuem.

## AUSTRIA-HUNGARY.

*Budapest...* Magyar Nemzeti Museum.  
*Kolozsvár...* Dolgozatok.  
*Lemberg (Lemberg) ...* Lndn.

## BELGIUM.

*Brussels...* Bulletin de la Société d'Études Coloniales.

— Ball. de la Soc. Géographie.  
— Institut Solvay.  
— La Revue Congolaise.  
— Missions Belges.

*Ghent...* Volkskunde.

## FRANCE.

*Dax...* Société de Borda.  
*Paris...* L'Anthropologie.  
— La Nature.  
— La Revue Préhistorique.  
— L'Ethnographie.  
— L'Homme Préhistorique.  
— Revue des Études Ethnographiques.  
— Revue des Traditions Populaires.  
— Société Préhistorique Française.  
— Statistique Générale de la France.

GERMANY.

- Danzig... West Preussisches Provincial-Museum.  
Dresden... Bericht des Vereins für Erdkunde.  
Frankfurt a/M... Völker-Museum.  
Giessen... Hessische Blätter.  
Gotha... Petermanns Mitteilungen.  
Guben... Niederlauzitzer Mitteilungen.  
Hamburg... Museum für Völkerkunde.  
Kiel... Mitteilungen des Anthropologischen Vereins in Schleswig-Holstein.  
Munich... Correspondenzblatt.  
— Geographische Gesellschaft.  
— Prähistorische Blätter.  
Nürnberg... Bericht der Natur-historischen Gesellschaft.

INDIA.

- Simla... Archaeological Reports.  
Lahore... Punjab Historical Society.

ITALY.

- Como... Rivista Archeologica della Provincia de Como.  
Naples... La Scienza Sociale.  
Rome... Rivista Italiana di Sociologia.  
— Reale Società Geografica.

AFRICA.

- Natal, Pietermaritzburg ... Museum.  
Egypt, Khartoum ... Sudan Notes and Records.

NETHERLANDS.

- Amsterdam... Nederlandsch Indie, Oud und Nieuw.

NEW SOUTH WALES.

- Sydney... Science of Man.

Tahiti, Papeete... Bulletin de la Société d'Etudes Océaniennes.

NORWAY.

- Tromsø... K. Norske Videnskabers Selskab.

PORTUGAL.

- Lisbon... Archeologo Português.

RHODESIA.

- Bulawayo... Proceedings of the Rhodesian Scientific Association.

SPAIN.

- Barcelona... Estudis I. Materials.

SWEDEN.

- Uppsala... Kungl. Universitetets Bibliotek.

SWITZERLAND.

- Zürich... Schweizerisches Archiv für Volkskunde.

- Jahresbericht der Schweiz-Gesellschaft für Urgeschichte.

- Geneva... L'Institut Suisse d'Anthropologie Générale.

UNITED STATES.

- Andover, Mass... Phillips Academy (Dept. of Archæology).

- Berkeley, Cal. ... University.

- Boston... American Journal of Archæology.

- Chicago... Open Court.

- New York ... American Museum of Natural History.

- Science.

- Philadelphia... Proceedings of American Philosophical Society.

- Washington ... Bureau of American Ethnology.

- Bureau of Manufactures.

SUBSCRIBERS TO PUBLICATIONS OF THE INSTITUTE.

- Barrow-in-Furness. Public Library.  
Birmingham. Central Free Library.  
— University Library.  
Cairo. School of Medicine.  
Coimbra. Museu Antropológico.  
Cork. University College.  
Liverpool. Free Museum.  
London. Guildhall Library.  
— London Library.  
Lucknow. Provincial Museum.  
Madras. Connemara Public Library.

- Madras. Archaeological Survey.

- Manchester. Free Reference Library.

- Newcastle. Public Library.

- New York. Cornell University.

- Ottawa. Library of Parliament.

- Salford. Royal Museum.

- Tokyo. Imperial University.

- Vancouver. University of British Columbia.

- Victoria, B.C. Provincial Library.

LONDON:  
HARRISON AND SONS, PRINTERS IN ORDINARY TO HIS MAJESTY,  
ST. MARTIN'S LANE.

JOURNAL  
OF THE  
ROYAL ANTHROPOLOGICAL INSTITUTE  
OF GREAT BRITAIN AND IRELAND.

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MINUTES OF THE ANNUAL GENERAL MEETING,

JANUARY 23RD, 1917.

Professor A. KEITH, *President, in the Chair.*

The Minutes of the last Annual General Meeting were read and confirmed.

The PRESIDENT appointed Mr. PYCRAFT and Major O'BRIEN as scrutineers, and declared the ballot open.

In the absence of the TREASURER, his Report was read by the HONORARY SECRETARY, and was accepted.

The HONORARY SECRETARY read the Report of Council for 1916, which also was accepted.

The PRESIDENT then delivered his address, entitled "How can the Institute best serve the Needs of Anthropology?"

The SCRUTINEERS handed in their report on the ballot, and the following were declared to be duly elected as Officers and Council for 1917-18:—

*President.*—Sir Hercules Read, LL.D., F.S.A., F.B.A.

*Vice-Presidents.*

W. H. R. Rivers, M.A., M.D., F.R.S.	Sir Everard im Thurn, K.C.M.G., C.B.
C. G. Seligman, M.D.	

*Joint Hon. Secretaries.*

H. S. Harrison, D.Sc.	T. A. Joyce, M.A.
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*Hon. Treasurer.*—R. W. Williamson, M.Sc.

*Council.*

Capt. F. R. Barton, C.M.G.	H. J. E. Peake,
C. O. Blagden, M.A.	S. H. Ray, M.A.
L. C. G. Clarke.	Carveth Read, M.A.
O. M. Dalton, M.A., F.S.A.	F. C. Shrubshall, M.A., M.D.
M. Longworth Dames.	W. W. Skeat, M.A.
W. L. H. Duckworth, M.A., M.D., Sc.D.	Emil Torday.
H. J. Fleure, D.Sc.	S. Hazzledine Warren.
R. J. Gladstone, M.D.	W. W. Wright, M.B., D.Sc., F.R.C.S.,
E. S. Hartland, F.S.A.	F.S.A.
W. L. Hildburgh, M.A., Ph.D., F.S.A.	G. Udny Yule, F.S.S.
Miss M. A. Murray.	

A vote of thanks to the PRESIDENT for his address was proposed by Mr. A. L. LEWIS, who asked, in the name of the Institute, that the PRESIDENT would allow it to be printed in the *Journal*.

This was seconded by Dr. W. L. HILDURGH and carried by acclamation.

The Institute then adjourned.

## REPORT OF THE COUNCIL FOR THE YEAR 1916.

Although the continuance of the war has necessarily restricted the activities of the Institute, the Council has endeavoured, so far as possible, to maintain the standard of its publications, having constantly in mind the need for caution in expenditure. As was the case last year also, the hiring of outside accommodation for the ordinary meetings has been avoided. Although convinced that strict economy is imperative, under present circumstances, the Council is at the same time of opinion that after the war the Institute will be well advised to embark upon a more enterprising policy, and hopes that means will be found to enlarge the scope of its activities. It is well known to most Fellows that schemes having this object in view had already been formulated when war broke out.

As will be seen from the following table, a slight reduction in membership has to be recorded, viz., of ten subscribing and one compounding Fellows.

	Total Jan. 1st, 1916.	Loss by death or resignation.	Since elected.	Total Jan. 1st, 1917.
Honorary Fellows ...	43	—	—	43
Local Correspondents ...	36	1	—	35 <sup>1</sup>
Affiliated Societies ...	3	—	—	3
Affiliated Members ...	1	—	1	2
Ordinary Fellows :—				
(a) Compounding ...	69	1	—	68
(b) Subscribing ...	397	25	15	357
Total Membership ...	537	—	—	526

<sup>1</sup> Of these, 12 are also Ordinary Fellows.

The losses which the Institute has suffered through death are the following:— Sir L. Gomme (elected 1895, obituary notice appeared in *Man*, 1916, 54); Sir William Turner (elected 1889, obituary notice appeared in *Man*, 1916, 42); Major Travers (elected 1901); Sir Victor Horsley (elected 1894); Sir Richard Martin (Foundation Member, obituary notice appeared in *Man*, 1916, 89); Professor Tagliaferro (elected 1911); Rev. W. Cory James (elected 1910); Dr. J. W. Eastwood (Foundation Member); Mr. G. F. Hodgson (elected 1909); Mr. Eckley B. Coxe (elected 1912).

### MEETINGS.

The number of ordinary meetings was considerably less than in normal years. Four such meetings were held, at which five papers were read. Of these three were on ethnological and two on archeological subjects.

### HUXLEY MEMORIAL MEDAL.

The Huxley Memorial Medal for 1916 was presented to Sir James G. Frazer, D.C.L., LLD., Litt.D., on November 14th, when he delivered an address on "Ancient Stories of a Great Flood." The meeting was held in the Theatre of the Civil Service Commissioners, Burlington House, and the attendance was about 200.

In 1915 the Council invited M. Emile Cartailhac to deliver the Huxley Lecture for the year, but in view of the inconvenience to which M. Cartailhac would have been subjected in coming over to England for this purpose, the matter was held in abeyance for the time. It was later decided by the Council that M. Cartailhac should be presented with the Huxley Medal, without regard to the delivery of an address before the Institute. Arrangements are being made for the presentation of the medal under suitable conditions.

### PUBLICATIONS.

During the year two half-yearly parts of the *Journal* have been issued, viz., Vol. XLV, Part 2, and Vol. XLVI, Part 1. Of the former 98 copies, and of the latter 88 copies, have been sold. The corresponding figures for 1915 are 94 and 83 respectively. An increase even of 9 copies sold must be regarded as very satisfactory, since a decrease might well have been expected.

The usual 12 monthly parts of *Man* have been issued. Whilst there has been a very slight decrease in the Office sales, the amount received from subscriptions shows a greater increase.

### LIBRARY.

The accessions to the Library number 169, of which 80 are bound volumes. The exchange list has been augmented by two Indian and one foreign publications.

Whilst the binding of books and periodicals has been kept within the lowest limits, this very necessary work has not been entirely neglected. Twenty-six volumes of periodicals have been bound, and, in addition, forty-five books which were suffering through the dilapidated condition of their covers.

The Council has to thank Mr. J. Edge Partington for his very useful work in the Library during the early part of the year, when he was engaged on the completion of the classification of the Institute's collection of pamphlets, which are now arranged in cardboard cases. The binding of these pamphlets, as well as of a number of periodical publications, should be undertaken when funds are available.

**INTERNAL.**

The resignation of Capt. T. C. Hodson, who had been Honorary Secretary of the Institute since 1913, took effect at the beginning of the year under review. The Council desires to place on record its great appreciation of the services rendered to the Institute by Capt. Hodson.

The Council feels that the retirement of Professor Keith, who has been President of the Institute for the past four years, must not be allowed to pass without an expression of gratitude. Professor Keith consented to remain in office during this period as a concession to the unusual conditions, and it has only been at considerable personal sacrifice that he has been able to give his invaluable services to the Institute for so long a time.

**EXTERNAL.**

On the invitation of the Royal Society, the Council appointed two representatives on the Board of Scientific Studies, Professor Keith and Professor Seligman. In October an invitation was received from the Board to submit a report to its Executive Committee on the "Need of a Physical Survey of the British People." In consultation with several Fellows of the Institute who are not members of the Council, a report was prepared and forwarded to the Board. The Council hopes that this report will aid in the establishment of an anthropometrical reform which is long overdue.

**HONOURS CONFERRED ON FELLOWS OF THE INSTITUTE.**

The Council desires to offer its congratulations to Sir W. Baldwin Spencer, upon whom the honour of K.C.M.G. has been conferred; to Sir M. A. Ruffer, C.M.G., and Sir R. J. Tata, both of whom have received the honour of Knighthood; to Lt.-Col. Shakespeare, who has been awarded the C.M.G.; and to Capt. H. A. Macmichael, who has been made a member of the Distinguished Service Order.

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**TREASURER'S REPORT FOR THE YEAR 1916.**

The Revenue for the year 1916 (including a gift of £50) has exceeded its expenditure by £152 17s. 4d. Deducting from this surplus the sum of £12 10s. 9d., being the balance of the heavy deficiency of 1914 not already covered by the surplus of 1915, the position is that, after making a necessary transfer to capital account of £100, we were at the end of 1916 £40 6s. 7d. better off than at the end of 1914.

The following comparative statement (omitting shillings and pence) of a few

of the more important items of revenue and expenditure for 1913 and the three war years 1914, 1915 and 1916 is interesting:—

	1913.	1914.	1915.	1916.
Amount received from subscriptions ...	£ 898	£ 770	£ 787	£ 754
Amount received from sale of <i>Journal</i> (outside sales).	213	163	142	182
Cost of producing <i>Journal</i> ... ...	442	383	241	274
Net cost of <i>Journal</i> ... ...	229	220	99	92
Total revenue ... ... ...	1,376	1,175	1,167	{ 1,184 50
Total expenditure ... ... ...	1,305	1,303	1,052	1,081

It will be noticed that the amount received from subscriptions in each of the years 1914, 1915 and 1916 fell below that of 1913 by over £100; and that it reached its lowest level in 1916, the difference between the amounts for that year and 1913 being £144. The total revenue for each of the three years 1914, 1915 and 1916 (deducting from the revenue for 1916 the gift of £50 of which I shall speak directly) has been, roughly speaking, £200 less than that of 1913.

The figures representing the cost of the *Journal* in 1914, when compared with those for 1913, show some reduction; but the total expenditure in 1914 was substantially the same as in 1913. The reason for this was, as stated in my report for 1914, that when war broke out the Council was already committed to expenditure based on an assumption of the continuance of normal conditions. The cost of the *Journal* and the amounts of total expenditure in 1915 and 1916 show the results of the Council's policy of war economy.

The Institute is greatly indebted to Sir Thomas Wrightson, Bart., for a generous gift of £50, by which the Council was enabled to publish a *Journal* somewhat larger than they would otherwise have felt justified in doing. This is the sum, which for the purpose of comparison of normal figures, I deducted from my previous calculation.

The Council has been able to arrange with the landlord of the Institute's premises for a reduction of the rent payable from £225 to £175. The change only affected one quarterly payment in 1916; but in the present and future years the Institute will have the benefit of the whole £50 reduction.

Returning now to the question of the surplus on revenue account, I must point out that we have to watch, not only our revenue, but our capital also; and the contemplation of the capital account is somewhat depressing. Our Burma Railway and Metropolitan investments, which at the end of 1914 stood (taken

together) at £1,224 6s. were, at the end of 1916, only worth £1,133 10s.—a loss of £90 16s., the bulk of which arose in 1916. It is to meet this loss that I have transferred £100 from revenue to capital account, and the money has been invested in Government 5 per cent. Exchequer Bonds. This fall in value is mainly due to the enormous demands for money caused by the war and Government borrowings in various forms at high rates of interest, factors which inevitably bring down the values of investments only paying lower rates. I fear this loss may go on increasing during the continuance of the war; and I anticipate that, even after its termination, the money market will still be stringent for years to come.

We must, therefore, keep a constant watch over our capital account, and if possible keep down expenditure, so as to be able to replace out of revenue any further diminution in the value of our investments.

Up to the present we have been able to do this, and still have in hand a surplus revenue of £40. I think this justifies a little relaxation of our recent economy; and in my opinion the wisest method of relaxation is a small tentative enlargement of the *Journal*, the most important feature of the Institute's operations, and practically the only benefit that a large number of Fellows derive from their membership. This view is shared by the Council.

I must point out that these financial difficulties are immensely aggravated by the non-payment by Fellows of their subscriptions. The number of Fellows during the last two or three years has been greater than it ever was before, and yet the amount of subscriptions received has decreased by £144.

The total amount of arrears had, at the end of 1916, reached a sum of £237 6s., some of the Fellows being in arrear two or three years. Each of these has had three or four reminders every year, and except in a very few cases they have taken no notice whatever of the applications. I therefore have to regard old arrears as of but little value; hence my estimate of the total value of the arrears is practically what it was a year ago. The Council is not pressing Fellows who are engaged on active service either on land or at sea, and no doubt some others are being hardly pressed by the increased cost of living caused by the war.

This Report shows, however, what uphill work is the effort to carry on the operations of the Institute under existing financial conditions; and I earnestly appeal to Fellows not to increase the difficulties of the Council, if they can possibly avoid doing so. If Fellows cannot, or will not, pay their subscriptions, the enlargement of the *Journal* to anything approaching pre-war proportions is impracticable. The *Journals* of Fellows, whose subscriptions have been more than twelve months in arrear, have, in accordance with the regulations of the Institute, been kept back; but on payment of arrears, these *Journals* will be forwarded at once.

ROBERT W. WILLIAMSON,

Hon. Treasurer.

## ROYAL ANTHROPOLOGICAL INSTITUTE

## ACCOUNTS FOR

## REVENUE

PAYMENTS.	£	s.	d.	£	s.	d.
BENT .....				212	10	0
" JOURNAL " .....				274	19	2
" MAN " .....				156	1	8
SALARIES .....				182	9	6
HOUSEKEEPING .....				31	7	4
ADVERTISING .....				11	4	0
STAMPS AND PARCELS .....				60	19	1
TELEPHONE AND TELEGRAMS .....				6	13	0
PRINTING AND STATIONERY .....				58	1	10
COAL, GAS, AND ELECTRIC LIGHT .....				12	11	2
LANTERS .....				3	13	6
INSURANCE—						
Fire .....	5	0	0			
Aircraft .....	12	10	2			
Employers' Liability .....	0	10	0			
				18	0	2
TRAVELLING .....				0	17	10
SUBSCRIPTIONS TO OTHER SOCIETIES, DIRECTORIES, ETC. ....				4	10	0
" HUXLEY LECTURE " .....				1	17	6
NEW STOVE .....				12	3	9
AUDITORS' FEE .....				3	3	0
TYPEWRITER, ETC. ....				1	6	3
ASSOCIATION FOR PROTECTION OF TRADE .....				1	4	0
SUBSCRIPTION TO BRITISH ASSOCIATION .....				1	0	0
POST OFFICE (telegraphic address) .....				1	1	0
BANK CHARGES .....				0	17	10
SUNDRIES .....				7	8	5
TRANSFER TO LIBRARY ACCOUNT .....				17	3	2
" CAPITAL ACCOUNT .....				100	0	0
Balance in hand, 31st December, 1916 .....				254	12	1½
				£1,436	15	3½

## LIBRARY

BOOKS AND BINDING .....	£	s.	d.
	17	3	2

## OF GREAT BRITAIN AND IRELAND.

THE YEAR 1916.

## ACCOUNT.

	RECEIPTS.	£ s. d.	£ s. d.
BALANCE in hand, 1st January, 1916 .....			201 14 9½
SUBSCRIPTIONS :—			
Current .....	698 3 6		
Arrears .....	40 6 0		
Advance .....	15 12 0		
		754 1 6	
SALE OF "JOURNAL" .....			182 4 7
SALE OF "MAN" .....			168 13 1
SALE OF "HUXLEY LECTURE" .....			.4 13 6
DONATION BY SIR THOMAS WRIGHTSON, BART., TOWARDS COST OF "JOURNAL" .....			50 0 0
INCOME-TAX RETURNED (THREE YEARS) .....			14 17 0
ADVERTISING .....			3 6 10
DIVIDENDS .....			56 0 4
SUNDRIES .....			0 3 8
			£1,435 15 3½

## ACCOUNT.

	£ s. d.
TRANSFER FROM REVENUE ACCOUNT.....	17 3 2

### CAPITAL ACCOUNT.

DECREASE IN VALUE OF £896 BONDS RAILWAY STOCK:					
Valued 31st December, 1915, at 104 .....	931 6 0			BALANCE BROUGHT FORWARD 1ST JANUARY, 1916	£. s. d.
Now valued at 100 .....	886 0 0			TRANSFER FROM REVENUE ACCOUNT .....	4,965 10 3
				INCREASE IN VALUE OF SUBSCRIPTIONS IN ARREAR	100 0 0
				Now estimated at .....	
				Valued 31st December, 1915, at .....	56 14 0
				Valued 31st December, 1916 .....	55 5 1
					1 8 11
					£5,066 10 3

BALANCE SHEET.

	£	s.	d.	£	s.	d.
Amount due for Anthropological Notes and Queries on 1st January, 1916 .....	46	5	8	3,493	0	0
Received during 1916 .....	4	11	4	290	0	0
	—	—	—	886	0	0
	50	17	0	247	10	0
	—	—	—	100	0	0
	50	17	0	56	14	0
Total outside Liabilities .....	50	17	0	18	19	4

Balances of previous Accounts:	
Revenue Account .....	254 12 1 <i>1</i>
Capital Account .....	4,994 0 5
	<hr/> 5,248 12 6 <i>1</i>

<i>Bibliography</i> .....	50 18 1
<i>Physical Deterioration</i> .....	6 9 1
<i>Less received in 1916</i> .....	0 6 8
	<hr/> 6 3 5
Sir E. Ray Lankester's Lecture .....	22 6 8
<i>Less received in 1916</i> .....	0 6 6
	<hr/> 22 0 2
Coxhead's <i>N.E. Tribes of Rhodesia</i> .....	1 16 2
<i>Less received in 1916</i> .....	0 4 10
	<hr/> 1 11 4
Davrell's <i>Rom Folk Stories</i> .....	18 12 8
<i>Less received in 1916</i> .....	0 8 4
	<hr/> 18 4 4
	<hr/> 117 16 8
<i>Debtors' Report of Anthropometric Committee</i> .....	6 9 6
<i>Plus received in 1916</i> .....	1 4 6
	<hr/> 7 13 11
Owing by British Association .....	
Cash:	
In Bank.....	196 14 2
In hand (Petey cash) .....	3 4 0
	<hr/> 199 18 11
	<hr/> £5,299 9 6 <i>1</i>

ROBERT W. WILLIAMSON,  
*Hon. Treasurer.*

We have examined the Accounts of the Royal Anthropological Institute and have obtained all the information and explanations we have required. In our opinion the Balance Sheet at the 31st December, 1916, is properly drawn up so as to exhibit a true and correct view of the state of the Institute's affairs according to the best of our information and as shown by the books of the Institute.

JACKSON, PLIXLEY, BROWNING, HUSEY & CO.,  
CHARTERED ACCOUNTANTS,  
Auditors.

38, Coleman Street, E.C.  
17th January, 1917.

## PRESIDENTIAL ADDRESS.

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### HOW CAN THE INSTITUTE BEST SERVE THE NEEDS OF ANTHROPOLOGY ? "

By ARTHUR KEITH, M.D., LL.D., F.R.S.

DURING the four years I have had the honour of occupying the Presidential Chair—more than two of which have fallen within a period when our best endeavours, and our best thoughts, have been concerned with the affairs of a great and terrible war—I have had frequent occasions to turn back to past chapters in the history of our Institute. In those past chapters I often found guidance to help us in shaping our present policy, and I am certain, too, that those on whom the burden will fall of determining the lines along which the Institute is to progress, ought to be familiar with our experiments and endeavours in the past—our attempts which have succeeded, as well as our trials which have failed. It is with that aim in view that I am to turn your attention for a short space to our past history; but I have also another one which will at once appeal to the anthropological mind. One of our chief objects is to secure records of vanishing customs, lingering traditions, and dying races. I want to secure records, before it is too late, of certain phases in the history of this Institute. There are still, I am glad to think, a goodly number living of those who bore the anthropological burden during the "sixties" of last century. Some may still be able to restore certain obscure phases in our history. It is in the hope that senior Fellows who took an active part in our affairs in those distant days—Fellows such as Sir E. W. Brabrook, Mr. Worthington G. Smith, Mr. A. L. Lewis, Sir Henry Howorth, Mr. J. Frederick Collingwood, Professor Boyd Dawkins, Dr. Henry Jackson, Mr. Edward Clodd—may criticise and extend my interpretations, that I have dared to touch on our early history.

There can be no shadow of doubt as to when this Institute came into existence. We, who are now assembled here in the rooms of the Institute at 50, Great Russell Street, to hold our Annual General Meeting, are in direct annual and unbroken descent from the men who assembled as the Ethnological Society to hold their first Annual General Meeting in the month of May, 1844, at 3 p.m.<sup>1</sup> Every year since then there has been a General Meeting; we are now

<sup>1</sup> See MS. note pasted in cover of vol. i, *Journal of Ethnological Society*, in the Library of the Institute. Also Minutes of Council of Ethnological Society. The various volumes of Minutes of both Ethnological and Anthropological Societies are preserved in the Library of the Institute.

taking part in the 73rd. At that first meeting Vice-Admiral Sir Charles Malcolm was elected to the Presidential Chair, the anniversary address being read not by the President, but by the Secretary, Dr. Richard King, a man who figures prominently in our early history.

When the Society was actually formed in November, 1843, Dr. King was living at 4, Piccadilly, but at the September quarter-day of 1844 he took a three-years' lease of 27, Sackville Street, and let the drawing-room floor to the Society at an annual rent of £120. Dr. King became Secretary and landlord to the Society. During the first year, from November, 1843, until September, 1844, the Society seems to have held its meetings in Dr. Thomas Hodgkin's house, which was in Brook Street when the Society was formed. A little later Dr. Hodgkin's house at 35, Bedford Square, became a centre where men who were interested in all forms of progressive movements often met. By the second anniversary meeting, in 1845, the Ethnological Society was paying a rent of £135; in 1846 there was a membership of 170; the annual subscription was £2 2s.; but it was agreed that after the number had reached 200 there was to be in addition an entrance fee of £3 3s.<sup>1</sup> The critical number was never reached. When Dr. King moved to 17, Savile Row, in September, 1847, the Society again followed him and again took his drawing-room floor. At the end of a three-years' tenure in Savile Row Dr. King and the Society were at enmity; there was a financial crisis. The Society then took a room at 23, Newman Street, Oxford Street, at a rent of £26 per annum; the Society had its rooms at that address from September, 1852, until September, 1859, when it became a tenant of the Royal Society of Literature, at 4, St. Martin's Place, Trafalgar Square. We shall return to that address presently to witness some very instructive happenings.

The events which led to the formation of the Ethnological Society we know with some degree of accuracy. The central figure is Dr. Thomas Hodgkin<sup>2</sup>, a leading member of the Society of Friends, and Physician to Guy's Hospital. Medical men are still familiar with his name; a very well-defined condition of obscure origin is known all the world over as Hodgkin's Disease. We meet with his father in literature as the associate of Dr. Thomas Young; we meet with his brother as a philanthropist and barrister. Dr. Thomas Hodgkin has been involved in the movement which culminated in the abolition of slavery in the British Colonies (1833), and now in the year 1837 he has called into being a society to protect the native races—the "Aborigines Protection Society"—still in existence as an amalgamated part of the "Anti-slavery and Aborigines Protection Society."

<sup>1</sup> At a later date there was also an associateship for men living beyond a twenty-mile radius. The Associates paid an annual subscription of £1 1s. The Secretary was to be paid a salary of £100 per annum when the membership reached 200.

<sup>2</sup> I learned from Sir Rickman Godlee that Dr. Hodgkin's papers and correspondence were in the possession of Dr. Hodgkin's nephew, H. Hodgkin, Esq., who kindly allowed me to examine those of an anthropological nature. There are many important and interesting letters relating to anthropological matters.

He was then a man of 39, wearing, as he always did, the Quaker dress; a physician "careless of fees"; a philanthropist with his head rather than with his heart. He desired first of all to study and to understand native races, and help them when he learned how they lived and what they desired. The society he had called together was drawn chiefly from the Society of Friends. His companion, Richard King, who also had been a student at Guy's Hospital and a pupil under Dr. Hodgkin, was a member of the committee; he was a younger man, and I suspect also a member of the Society of Friends. He also was interested in native races. In 1833, when his studentship days were just finished, he set out with Admiral George Buck to the Great Fish River in search of traces of Captain Ross's Expedition, and there he commenced to study the Esquimaux. When we come across him as a member of the Committee of the Aborigines Protection Society in the year 1837, he is still a young man of 26, having spent over two years among the Esquimaux. Very soon two parties, or two policies, developed inside the Aborigines Protection Society—the student party, which wished to study native races sympathetically, to understand them, to raise and protect them; and the missionary party, which desired to protect their rights and bestow on them forthwith the privileges of European civilization. By 1842 the student party found there was no room for them in the Aborigines Protection Society; at least the founder of that society, Dr. Thomas Hodgkin, withdrew, and so did Dr. Richard King. Hence we find that on July 20th, 1842, Dr. Richard King issues an appeal to those who were in sympathy with the aims of the ousted party, proposing the formation of a new society—the Ethnological Society. On February 7th, 1843, there assembles in Dr. Thomas Hodgkin's room, twenty-three men, and the Ethnological Society comes into being.<sup>1</sup> The man they chose as first president is also worth our notice. He is Vice-Admiral Sir Charles Malcolm, one of a famous breed of brothers born in the county of Dumfries. When elected president he was a man of 61, and had seen much service, particularly in India. He was a thinking man, interested in surveying, in geography, and in the origin and distribution of native races.

The exact part taken by another member of the Society of Friends, Dr. James Cowell Prichard, in the formation of the Ethnological Society we do not know. He was senior to Dr. Hodgkin by twelve years. Dr. Hodgkin and he had come together at meetings of the British Association, and were on intimate terms. Indeed, I suspect that a paper read by Dr. Prichard at the meeting of the Association at Birmingham in the year 1839, on the Extinction of Native Races, had much to do with the formation of the Ethnological Society. There can be no doubt, at least, that the reading of that paper has a direct interest for us. It riveted the attention of the Association; a grant was made to a committee to

<sup>1</sup> I have followed the account given by Dr. James Hunt. There is another statement that the first meeting was held in November, 1843. The first paper read was one on Ethnology, written by Dieffenbach, and read by Hodgkin.

draw up, present, and distribute a series of questions to serve as a guide to travellers or residents who came in contact with native races. Hodgkin, Prichard, and Richard Owen were members of that committee. Their task was finished in 1843. The questions then drafted form in reality the first edition of a most useful publication, *Anthropological Notes and Queries*, which this Institute still continues to edit. Prichard and Hodgkin were keenly alive to the "irretrievable loss" which was taking place in tropical lands and British colonies, and if we examine the questions they drew up we shall be surprised to find how exactly they cover the scope of the *Notes and Queries* we still edit. We see here, too, the establishment of that close relationship which still exists, and I hope will continue to exist, between our Institute and the British Association for the Advancement of Science.

In 1844, when the Ethnological Society was only a year old, we find its most celebrated member, James Cowell Prichard, and its secretary, Richard King, on their way to the meeting of the British Association at York. Ethnology had just obtained the status of a sub-section in Section D (Botany—Zoology). Prichard is president of the sub-section, King the secretary. In their rooms in London they plan the campaign which is to win for Ethnology an equal position among the departments of knowledge for which the British Association stands as sponsor. In that year, as ever afterwards, Ethnologists attended the British Association to hold a late summer or early autumn meeting, but they met, not as members of the Ethnological Society, but as members of the British Association. They met not only to win recognition for their subject among the recognized sections of the Association, but to win attention and sympathy from the country at large; they could thus advertise their wares, gain adherents, and help forward the objects they had most at heart. They read their papers and brought them back to town to be published by the home or central society. The secretary, or some approved representative, reported the ethnological happenings at the Association when the Society held its first winter meeting. Those early traditions and practices have been handed down to us.

I have no intention of trying to give you a full history of the Ethnological Society. We shall have only a glimpse of what they tried to do, and the difficulties they met with on the way. The programme those pioneers drafted is the one we still hold by. Their Society was to be a "centre and depository for the collection and systematization of all observations made on human races"; they were to assist travellers; they were to place their information at the disposal of Government servants; they were to discover all that could be known about the breeding, acclimatization, and building-up of races, past, present, and future. A really liberal and up-to-date programme. In his first presidential address Sir Charles Malcolm declared the ethnological harvest was ripe and must be garnered, if it were to be garnered at all; that the main responsibility fell on our country, because we British were more intimately in touch with all the world than any other nation. We see from their Journal, the *Journal of the Ethnological*

*Society*, that papers came in, facts garnered from all quarters of the world; Vol. I appeared in 1848, Vol. II in 1850, Vol. III in 1852, Vol. IV in 1854, and then comes a blank. Their publications recommence again in 1861 as *Transactions*. In Vol. I we find certain duplicated pages, pp. 129-40, which tell us what was happening in 1857-58, and 1858-59, but of 1854-55, 1855-56 we have no record except such facts as are recorded in the Minutes of the Council.<sup>1</sup> We can guess pretty accurately what has been happening. The start is auspicious, but the membership never reaches 200; in 1858 there are only 38 paying members, representing a total income of less than £80. At the Annual General Meeting of 1858 only seven members attend. With expenses amounting to £135 per annum there was less than nothing left for the cost of publications—yet they published. There was an unpaid printer's bill of £73; financial crisis succeeded financial crisis. In 1848 appears Vol. I of the *Journal of the Ethnological Society*, containing papers read at the monthly meetings of the sessions 1843-44, 1844-45, 1845-46, 1846-47, 1847-48. In that period there have been two presidents—first Malcolm, then Prichard; there have been only two presidential addresses. Volume I closes with an obituary notice of the president, the great Prichard; Dr. Richard King, the secretary, an eccentric and visionary polar explorer, writes the notice, and soon afterwards resigns his post in high dudgeon.

In 1850 Vol. II appears, and then Vol. III in 1852; we find Malcolm has again been elected president, but at the close of 1851 he dies, an old but vigorous man of 69. We see that certain changes have been occurring. It is not any longer Richard King who is secretary, but Richard Cull<sup>2</sup> of 15, Tavistock Street. He is an eminently safe man: he holds the opinion that religion stands or falls with the doctrine that all human races are the descendants of a single pair; to him it is ridiculous that Ethnologists should seek to trace man's history by the study of fossils; he tells the members how glad he is that all reputed discoveries of fossil man are discredited by right-thinking people. His council we find packed with eminent physicians and surgeons. Sir James Clark, Bart., Body Physician to the Queen, and Sir Benjamin Brodie, the surgeon, are there. Brodie becomes president; proceedings become humdrum; then at the close of 1854 they apparently go to sleep. With the publication of Vol. IV in 1854 there is no further record until we get to 1861, when the *Transactions*, Vols. I to VII, begin to appear. Sir James Clark, we find from the interleaved pages, has been president in the meantime, and our friend Dr. Hodgkin is still an active member, and remains so until his death at Jaffa in 1866. He was one of the few men who

<sup>1</sup> From these Minutes I find that Dr. James Conolly was president in 1854-55, 1855-56; Dr. Kennedy, 1856-57; Sir James Clark, Bart., 1857-58, 1858-59. On Sir Charles Malcolm's death, in 1851, the Society asked Lord Brougham to become President. He declined. At a later date Admiral Fitzroy was invited. He also declined.

<sup>2</sup> He was secretary for seven years, resigning in the financial crisis of 1857. Like his predecessor, Dr. Richard King, he brought financial claims against the Society after his retirement.

takes out his purse when the Society is in difficulties. This good and great man of sixty-eight was studying the Arabs at the time of his death.

We have already seen in the Aborigines Protection Society that Ethnology and missionary propaganda could not live and prosper under the same roof; if we look beneath the surface of those earlier years of our parent society, we see that orthodoxy and Ethnology are equally incompatible. Even at a later date, in 1866, we find Sir Samuel Baker, the African traveller, declaring that there could be no doubt as to the rapidity with which races become differentiated, for the creation of man took place in the year 4004 B.C., and the differentiation of the negroes of the White Nile was therefore the work of 5870 years.

Before passing on to the reconsideration of the printed proceedings in 1861, it is necessary to glance at some of the men who are meanwhile playing an important part in the Society. There is first and foremost John Crawfurd, a tall, vigorous, overpowering figure, a highlander from Islay, who can still speak and think in the Gaelic, trained in medicine, but during his long life in the Far East turned linguist, governor, and ambassador. He begins to take the centre of the stage at the Ethnological Society in 1847—a man of 64—then retires until 1859, when he again joins and remains a dominating figure until his death in 1868. He is a man of infinite knowledge gleaned from books and from intercourse with many races, always volatile, a man of decided and heterodox opinions, to which he gave an air of finality.

Another extraordinary figure flits across the ethnological stage: Robert Knox, the anatomist. His meteoric career in Edinburgh had come to an end; in the early days of the Ethnological Society he was an Ishmaelite in London, preaching his gospel of race with a rapier tongue. In the second year of the Society's existence his name is removed as his subscriptions are unpaid. He was of the stuff of which Scots Covenanters were made, but his religion was made by Cuvier, more particularly by Geoffroy St. Hilaire: he was virulent, clever, and heterodox, dealing in racial prophecies and hating all accepted forms of religion. We can well understand that the Ethnological Society, with Benjamin Brodie and Sir James Clark at its head, shut the door in his face when he sought to rejoin their company. Nevertheless he is to have an influence, for when resuscitation becomes apparent in 1860, Knox is there an active member. Then, too, there is the figure of another medical man, Robert Gordon Latham, who has sacrificed all his professional prospects in order that he might provide his countrymen with a foundation whereon to build a knowledge of human races; for, in his opinion, it was the bounden duty of Britons—more than of any other nation—to know the peoples of the world. One cannot forget the picture that the late Dr. John Beddoe draws of the old man about the year 1857—Beddoe had become a member of the Ethnological Society in 1854—broken down, disappointed, and poor. He had seen the recognition, the honours, and the pensions pass to those who quietly climbed the rungs of the official ladder, while he was left in his dusty study, forgotten, neglected, and unrequited for his hard and studious labours. Admiral Fitzroy—Darwin's captain—was an active member, and so was the young

and daring James Hunt, who joins the Society in 1856, a Cambridge undergraduate of twenty-one. He is the son of a gentleman who has taken up the cure of stammering as a means of livelihood, and makes certain that his son will be qualified to succeed him by having a liberal medical education. The Rev. Charles Kingsley joins at the same time as Hunt.

By 1861 the Ethnological Society has begun to waken up again ; a new series of publications commences—the Transactions—which is issued annually until the appearance of Vol. VI in 1867. The reawakening is due to many circumstances : there is first the appearance of Darwin's *Origin of Species* at the end of 1859 ; there has been a wonderful discovery at Neanderthal in 1857 ; definite traces of Pleistocene man have been discovered in the Aurignac Cave by Lartet in 1860—Lartet, who is soon to be joined and effectively supported by an active member of the Ethnological Society, Henry Christy ; Boucher de Perthes' discoveries are being discussed and admitted as authentic. Evans, Lubbock, and Prestwich have gone to see his flints and fossils. Sir John Evans has discovered palaeoliths in the gravels of England. The literal authenticity of the Mosaic record is being questioned ; but above all, to understand the process of revivification, we have to keep an eye on young James Hunt. He becomes joint Secretary in 1859 ; the veteran John Crawfurd has returned to the Society and is President ; he has succeeded aged Sir James Clark—the Society has moved to 4, St. Martin's Place.<sup>1</sup> In 1862–63 young John Lubbock is placed in the Presidential Chair. He has round him a galaxy of talent—Huxley, Busk, Francis Galton (who is Secretary), John Evans, Rolleston, Murchison. Richard Owen attends, and presently the two outstanding Anthropological figures of the nineteenth century are there, Mr. E. B. Tylor and Colonel Lane-Fox. Sir Henry Howorth is an early member, so are Canon Greenwell, Prestwich, Hooker ; Boyd Dawkins, McKenny Hughes, and Rudler join later on. Russell Wallace attends occasionally, and so does Herbert Spencer ; Clements Markham is an active member, so is Hyde Clarke. With such a combination of talent one would have thought the prosperity of the Ethnological Society was assured. Talent alone is not sufficient : there must be a big following to bring funds, and a big membership roll the Ethnological Society never attained.

Lubbock retired from the Presidentship in 1865, after a two years' tenure, Crawfurd again succeeded and remained President until his death in 1868. The financial position from first to last was precarious. Huxley was appealed to and became President. The situation was explored. As was the case from 1859 onwards, the Society met at 4, St. Martin's Place, in rooms which were held from the Royal Society of Literature. The meetings were monthly as before, but it was resolved to give them "a more scientific character." An appeal was to be made for popular support in order to obtain followers and funds. It was discovered

<sup>1</sup> Before moving to St. Martin's Place in 1859, the Ethnological Society, through its President, Sir James Clark, had high hopes of being assigned quarters in Burlington House, which was then being handed over to learned societies.

that the English people were profoundly ignorant of their colonial possessions and fellow subjects. Four popular lectures were to be given at the School of Mines, and we may be certain that it is Huxley who has to carry the burden of the appeal. Women are to be admitted by the Society to those popular lectures, and it was hoped that the funds would be thereby increased. A new series of publications was started, Vol. I, N.S., of the *Journal of the Ethnological Society*; the new series ends in 1870 with Vol. II. The popular appeal for funds was a failure: women did not join. Popular appeal and scientific progress are apparently incompatible. Lane-Fox, always an organizer, has committees set up for definite purposes; the various branches of Ethnological learning are again classified.

We must now turn back to the year 1863 to witness one of the most remarkable and instructive of all the episodes which chequer the history of our Institute. We have seen how young Hunt became Secretary of the Ethnological Society in 1859, under the Presidency of Crawfurd. He has the fire and enthusiasm of an evangelist and the methods of a popular political propagandist. He wants to waken up the Society, but with a daring thinker and free-lance like Crawfurd at the head, with cool scientific minds in the Council and an orthodox Quaker majority in the Society—a majority that disliked the gospel of Robert Knox, and of his apt pupil, James Hunt, the wakening-up process proved difficult, and presently he abandoned it. For him Ethnology was too confined a term: no other word than Anthropology could embrace "the whole science of man." The Negro Question had become acute. Hunt's sympathies were with the South; the Negro had his place in Nature, and it was the business of anthropologists to define that place. There was then an Irish Question, a Celt Question, a Woman's Place Question and many European Racial Questions. Hunt desired to yoke Anthropology to politics. He recognized the need of popularization—the need of teaching the people. Hence on January 8th, 1863, he calls together in the rooms at 4, St. Martin's Place, the same rooms as were used by the Ethnological Society, those who were in sympathy with him. Only eleven respond. Hunt at this time is thirty years of age. He puts Captain Richard Burton in the Chair and forms the Anthropological Society—clearly a seceding body—of which he becomes the recognized Founder and first President. The Society meets in the same rooms as the Ethnological Society, but selects Tuesday in place of Wednesday, the day on which the parent Society meets, and holds its meetings much more frequently than the parent Society. Hunt starts a journal, *The Anthropological Review*, at his own expense; by 1867 he has spent £2866 on this Journal and is £539 out of pocket over the venture, but the Society relieves him of the debt. He prints the Society's Journal and includes it in the Review. The Society begins a Library and a Museum. It wants Government to help in establishing an Anthropological Laboratory and College. It undertakes the translation and publication of a series of continental works on Anthropology.

At an early stage—in 1864—a young man joins the newly-formed Society—Mr. E. W. Brabrook—Hunt has a keen eye for ability and places him in the post

of Director—really that of managing Secretary. Hunt himself keeps the presidential chair with Richard Burton's name in the foreground.<sup>1</sup> He is a great driving force; in 1865, the members of the Society entertain Burton to dinner—to celebrate the fact that the new Society has a membership of over five hundred, an income of £1555—figures which the parent Society has never nearly approached in the days of its greatest prosperity. Hunt supplies the energy: he is a man in a hurry, and science cannot be hurried without being damaged. The slow systematic collection of accurately ascertained facts is a patient, unexciting business. Good papers came in, many of them. But the bulk of the members expected entertainment or immediate instruction. The Negro Question, the Irish Question, the Aryan Question, Race and Religion, Race and Music, Phrenology and other subjects which gave opportunity for debate, were brought forward; there was debate, but no progress. We may take a typical instance. Mr. McGrigor Allan contributes a paper with the title "*John Bull versus Jonathan*," in 1868. The debate itself we might pass unnoticed, save for the contribution which the poet Swinburne made to it. Sir Edward Brabrook has told us how the leading members of the Anthropological Society dined together just as we do now—before the evening meeting. In those days fellows of the Anthropological Society met as the "Cannibal Club" in an Italian Restaurant off Leicestor Square; they had a negro image as their mace, and Swinburne was an enthusiastic member of the club. It was after such a dinner, in 1868, that Mr. McGrigor Allan's paper was read on "*John Bull versus Jonathan*." From Mr. Swinburne's contribution to the discussion we see how wide the bounds of Anthropology had become. He discussed American poets and their works! The discussion lasted three nights. The methods had become those of a debating society; the movement was in a circle and ended where it began. Rules had to be framed to protect the Society from members who spoke too long and said nothing.

We can see, too, that with Ethnologists and Anthropologists meeting in the same rooms at 4, St. Martin's Place, and divided into two rival and contending camps, there will develop some poignant positions when they all meet at the British Association at Newcastle in 1863. There will be a scramble for the machinery of the Association. Some men like Lane-Fox, E. B. Tylor, Beddoe, Dr. Hyde Clarke, Thurnam, and Barnard Davis saw merits in both factions and belonged to both; Worthington G. Smith, A. L. Lewis,<sup>2</sup> who has played so great a part in our affairs, Norman Lockyer and Mivart followed Hunt. In those days Ethnology was bracketed with Geography in Section E. The new Society fought for a change: it desired a section to be called "Anthropology." The Ethnologists

<sup>1</sup> Mr. J. F. Collingwood, in a letter to me, writes: "I joined Hunt, on invitation, directly he and Burton had made a beginning, and worked for three years as Honorary Secretary. We got the Society together by sheer canvassing, a great deal of correspondence being used. We were not long before we gave the members something to show—books from French and German sources" (March 25th, 1917).

<sup>2</sup> Mr. Lewis informs me he was not present at that meeting; he joined the Anthropological Society in 1866.

kept the upper hand in 1863, '64, and '65. Crawfurd describes Hunt as "an industrious, enthusiastic, and useful person"; Lubbock regards "Anthropology" as an ugly name for "Ethnology," the aged Murchison dislikes the word and the men who use it. Nevertheless at the meeting held at Nottingham in 1866, the British Association accepts "Anthropology" as a designation and gives it a place—an old place—in Section D—with Biology. The new Society has won. In 1867, at Dundee, the Anthropologists are again up in arms and leave Section D to hold a separate meeting of their own. It was not until 1884 that a separate Section H was established for Anthropology.

We have seen the extensive programme mapped out by the new Society. Hunt conceived the establishment of a College of Anthropology; he rightly claimed that it was desirable in national interests and demanded aid from the Government. But the Government of 1863 was deaf and unresponsive as was its successor of fifty years later. He raised an Exploration Fund; he wished to see lectureships founded and lecturers appointed to teach Anthropology to the people. He had thumped the big drum and assembled the crowd; his difficulties began when he had to keep the newly assembled members together. An anti-missionary debate, led by Burton, resulted in the withdrawal of twenty members to found the Victoria Institute—which desired and desires to reconcile religion and science. He had yoked Anthropology to Politics, to Religion, to Nationalism, with the same result as happened in earlier days when it was yoked to Philanthropy. There could be no yoking or alliance without distortion of the truth; if the truth was to prosper, Anthropology had to be cultivated for its own sake—let its facts lead where they will. All that, at least, we can learn from our past history.

Then there was the matter of finance. With such an expensive and daring programme the crash was bound to come: and come it did. The income of the Society had dropped from £1555 in 1865 to £1215 in 1867. In the same year the income of the parent Society was only £300, but then its liabilities were much less. An emissary had been sent by Hunt to examine and to report on the collections in the Museums of Scandinavia and to arrange for a translation of Anders Retzius' works. The translation was in the Press when the smash came; all had to be countermanded. All translating and publication of translations had to cease. Hunt withdrew from the Chair to become Director, Burton taking his place as President. There was a debt of over £700—Hunt's health began to give way. He desired a reunion of the two Societies.<sup>1</sup> They both met in the same rooms in London and were fellow-members of the same Association. Hence in 1868, the Ethnologists made Huxley their President; the Anthropologists—at Hunt's suggestion—placed Beddoe in their Chair, with a scheme for an amalgamation in view. The Ethnologists could not abide the word "Anthropology" and the Anthropologists would tolerate no other word. Hyde Clarke, who belonged to both Societies and had refused, in spite of an adverse vote, to withdraw from the

<sup>1</sup> From the inception of the Anthropological Society, Hunt was continually throwing out feelers for an amalgamation with the parent Society.

Anthropological Society, was a negotiator. He openly described Anthropology as "Puffery, jobbery, and charlatanism." No wonder negotiations fell through. But time and death accomplish much that direct effort fails to effect. In 1869, the British Association met at Exeter; the old antagonists were there. After the meeting the members of the Anthropological Department of Section D went to explore round barrows in the neighbourhood, and there James Hunt contracted an illness. It was the original Secretary of the Ethnological Society, the excitable, eccentric, and erratic Dr. Richard King, who tended him and conveyed him to his home at Ore House, Hastings, where he died on August 29th, 1869. He was in his thirty-sixth year at the time of his death—tall, handsome, fair complexioned, and worshipped by his followers—such a man as appears only once in a generation.

With Crawfurd dead in 1868 and Hunt now gone, negotiations again opened, and on February 14th, 1871, the members of the two Societies again met as a reunited body under the name of the Anthropological Institute of Great Britain and Ireland, with Sir John Lubbock as first President. No new Society was really formed—it was simply a re-incorporation of the two branches into which the original Society had become divided in 1863. In 1880, Col. Lane-Fox became General Pitt-Rivers, but remained the same man; in 1871, the central organization of British Anthropology took a new name, but it was not a new creation: it was an old body under a new name.

February 14th, 1871, marks the beginning of a new period in the story of our Institute. The reunion resulted in many gains; the stable and accurate methods of the Ethnologists were leavened by the enthusiasm and push which had characterized the Anthropologists. There were no longer two rents to be paid at 4, St. Martin's Place, but only one; the three publications, *Journal of the Ethnological Society*, *Memoirs of the Anthropological Society*, and *Anthropological Review*, were replaced by a single journal—the *Journal of the Anthropological Institute*. There was no longer need for two sets of officials. We see how matters are progressing when the annual general meeting is held on January 15th, 1872. There have been 42 new fellows elected; there are then 489 ordinary subscribing fellows, and 96 who have paid life subscriptions—altogether 585 fellows. That was a prime moment: we expect prosperous times to follow. In one sense they do; we see how excellently Presidents were chosen: Lubbock, 1871–72; Busk, '73–74; Lane-Fox, '75–76; John Evans, '77–78; E. B. Tylor, '79–80; Pitt-Rivers, '81–82; Flower, '83–84; Galton, '85, '86, '87, '88; Beddoe, '89–90; E. B. Tylor, '91–92; Macalister, '93–94; Brabrook, '95–96–97; Rudler, '98; Read, 1899–1900. This point brings us to the end of the century, and also, as we shall see, to the beginning of a new period in the History of our Institute.

The Journals are not big, but of excellent quality; the exact methods practised by Pitt-Rivers, Galton and Flower prevail more and more. Tylor introduces a new era in systematic work, and yet the membership keeps falling all through the period we are dealing with. The funds diminish as the need for them increases. A misunderstanding arises with the electors of Busk in 1873. He was a staunch

Ethnologist like his predecessor, Lubbock. The Anthropologists favoured a representative of their Section—R. S. Charnock. Over a score withdrew when their claim was refused, and formed the London Anthropological Society.<sup>1</sup> A Society which comes into existence for personal reasons cannot live, and the new Anthropological Society came to an end in 1876. A defection of this kind does not explain the gradual loss in membership. In ten years—by 1881—the total membership was 449—a little over 300 being annual subscribers, against a total of 585 in 1872, with 489 ordinary subscribers. In 1890, the total fellowship was 433, 223 being annual subscribers, 92 life members, the remaining being honorary members. In 1895, the total membership was 357, the annual subscribers being 202, and the life members 88. The public enthusiasm of 1872 kept ebbing until we enter a new phase at the very end of the century.

So far I have kept finance in the background. If the Anthropologists brought numbers and zeal, they also brought liabilities. That became quite apparent when the balance sheet was prepared for the Annual General Meeting on January 15th, 1872. There was an outstanding printer's bill for £837. There was a total indebtedness of £1293 to be met—a year's income. Busk came to the rescue; in 1874, the members of the Council subscribed £200 to help to pay off the debt; in 1875, £640 was collected; by 1877 a little over £100 still remained to be paid off. In 1877, illustrations began to appear in the *Journal*—a necessary addition, but expensive. By 1880 the income from annual subscriptions had fallen to £554. The gorilla skeleton in the Museum was sold: that brought £30. Next year, 1881, £54 was realized by the sale of the Ethnological Collection—the Museum being further depleted—to help the Library. At the meeting of the British Association at York in the year 1881, Sir William Flower made the needs of the Institute known, and collected £113 for its funds. In 1888, Galton gave the Institute the proceeds of his lectures at the Natural History Museum, South Kensington; still financial matters went from bad to worse. In 1899, funds were raised by selling the Tasmanian skeleton—£115. On only one occasion had the Institute undertaken any special publication: Mr. Man's Monograph on the Andamanese in 1886. In 1890, Mr. Ling Roth gave the Institute the manuscript of his work on the Tasmanians, requesting it to undertake publication; with regret the Institute had to decline for want of funds.

All through this period—from 1872 to 1900—the British Empire was extending; its custodianship of native races was ever increasing; its responsibilities towards them ever growing. Yet all that time our Institute was dwindling in membership, and becoming more crippled financially. Looking back over that

<sup>1</sup> "Its formation," writes Mr. A. L. Lewis, "was not entirely due to personal reasons, for Charnock was not like Hunt, a man to excite enthusiasm amongst his colleagues. There was a feeling, whether rightly founded or not, that in the words of one of the circulars printed at the time—the object of the Ethnological Society is first to weaken as much as possible the Anthropological element in the Institute, and then to make it a mere section of the Geographical or some kindred body, which would result in the total exclusion of Anthropological enquiry." (March 15th, 1917.)

period now, one is thankful that the Institute accomplished so much, and yet one also marvels that there was not one rich man who had gained his wealth in colonial trade, who saw how old chapters in the history of the world were being wiped out, who had the insight to realize what a small body of his countrymen were trying to do, and come forward and give the means to do it. In France, in Germany, and in the United States, Anthropologists can depend on Government aid. But that is not our British way: we work by voluntary enterprise, but without funds Anthropological enterprise is impossible. There was, however, one man who understood, a young man of twenty-nine, Mr. Sydney Ellis. He was the son of Mr. E. G. Ellis, Chairman of the Midland Railway Company. Mr. Sydney Ellis was also in business. At the Belfast meeting of the British Association in 1874, he realized the nature of the work the Institute had in view, and when he died, in 1879, he left a legacy of £1000 free of duty, "to help in unravelling the Origin and Development of Man." Lane-Fox, in his presidential address of 1876, said: "Popular science leads nowhere"; that is true in one sense, but untrue in another. The receptive mind and will to help lies only in an odd man here and there, and it is our blame rather than his, if we fail to come together.

In 1891, the Institute again meditated a resort to popular lectures to the public as a means of raising funds and Fellows, but the project was finally rejected, rightly I think. That plan has been frequently attempted in the history of this Institute. Funds are our sinews: without them we can carry on no organized enterprise. The appeal must be a personal one, not to the general public or to an unresponsive Government, but to him who can sympathize with our aims, has a faith in our methods, and is in a position to give us financial help. We cannot afford to allow such a man to be ignorant of the Institute's existence—its aims and its means; any popularization which serves that end must be for good.

It was during the period I have been describing to you that Fellows of the Institute began a most useful work—which we still carry on—the organization of collective effort. It is true that the schemes were made public at the British Association, but they were hatched and matured in the rooms of the Institute. In this work the commanding figure of Pitt-Rivers and of that creative genius, Francis Galton, were the leading moving spirits. *Instructions for Travellers* becomes repeated editions of *Anthropological Notes and Queries*; the Anthropometrical Committee is set going in 1875, and issues its report on the physical condition of the people of the British Isles in 1883, Sir E. W. Brabrook being then Secretary. A Committee is constituted to define the racial types found in the British Isles, and formulate a method for recording facial features. Temporary Anthropometrical laboratories are established. Explorations in Palestine, in the Greek Islands and Egypt, are favoured. A scheme for collecting photographs of racial types and Ethnological implements is begun. Tylor initiates a survey of the North West tribes of Canada. Means are taken to bring the aims and methods of the Institute before the local scientific societies of the country—the corresponding Societies of the British Association. Towards the end of the century, an Ethnographical Survey

is instituted—at first of the British Isles, and later of the British Empire. Every one of those endeavours made by the Institute during the period 1871–1900 has a direct bearing on all the collective efforts which we, as Fellows of the Institute, are now making.

We are to touch lightly on the third phase of the Institute's history, which I regard as beginning with the present century. In 1898 comes the first symptom of the change: up to then the *Journals* had appeared quarterly, demy octavo, with a few illustrations, and they now appear half-yearly, imperial octavo, with numerous illustrations. The membership has a tendency upward, but the expenditure is some £27 in excess of the income. Mr. Lewis is Treasurer; Mr. O. M. Dalton, Secretary. Then in 1900 affairs are blossoming; Sir Hercules Read is President; Mr. J. L. Myres, Secretary; Mr. A. L. Lewis, with full thirty years' experience of the ways and customs of the Institute behind him, is Treasurer. We find reforms on foot. The aims and purposes of the Institute are being revived, so are its By-laws.<sup>1</sup> The Institute is there for the purpose of hearing papers read and discussing them; above all, it has to issue a *Journal* and publications; it should appoint correspondents at points of vantage throughout the world; it must have a real reference library; it must appoint committees for special investigation; it must maintain its co-operation with the British Association. The *Journals* increase in size; the Miscellanea and Reviews become an important section of the *Journal*. An Executive Committee is instituted. A Huxley Lectureship is founded and inaugurated. Presently the Miscellanea and Reviews are separated from the *Journal*, and appear with the appropriate title of *Man*. It is clear that some spirit with some power of vision has appeared in the Institute; some driving force that propels the Institute to shoulder its burden and move forwards to meet its Empire-wide responsibilities. The Institute undertakes to prepare the Anthropological part of the Catalogue of Scientific Literature. Expenses are cut down; a saving is made by dispensing with the services of a publisher and of a collector; the supply of refreshments at the close of meetings is stopped. The publication of special monographs, such as Hobley's *Uganda*, and several others, is undertaken. We place our finger on the pulse of the Institute—the list of subscribing members—to see how the process of revivification is affecting it. The total income has risen since last we looked: it was then £514; it is now (1901) £687; but there is a deficit of £155. In 1902 there is again a deficit (£140), but the membership is rising; the Institute is serving its purpose better than ever before, but it is going head-over-heels in debt. A crisis comes in 1903. There are now 266 annual subscribers, 64 more than in 1895; there is a total fellowship of 414. But there is a deficit of £260 on the year's workings. To a business man that looks ill—and hence the crisis. Mr. T. A. Joyce becomes Honorary Secretary, Mr. John Gray, Treasurer. Although I became a Fellow of the Institute in 1896, and was afterwards a member of the Council, I, unfortunately, was not then in touch with the affairs of the Institute. I view them from

<sup>1</sup> At this time the late Mr. R. N. Pye was Chairman of the newly-formed Executive Committee, and did much to further the progress of the Institute.

the written records just as a historian must do a century hence. I am resolutely of the opinion that the man or men who instituted the reformations at the beginning of the century brought salvation to the Institute. We are even now reaping the reward. In 1914, before the calm deliberations of our daily lives were swept away before the urgent demands of war, the annual subscribers had reached 400—the total membership was 539. The annual subscriptions amounted to £770. We were then deliberating how to improve our *Journal* by bringing it out in quarterly numbers, and how to give *Man* the place which its importance demands.

We had other plans in view—a new and better home for the Institute. We have seen that during the eight years of schism both Sections of our Fellows met at 4, St. Martin's Place, in rooms held upon lease from the Royal Society of Literature.<sup>1</sup> There, after the amalgamation, the Institute remained, paying a rent of £135 until April, 1884, when, during Flower's Presidency, it moved to No. 3, Hanover Square—the quarters of the Zoological Society. There the rent was practically the same, and there was a comfortable and convenient meeting room. Then, in 1908, when the Zoological Society moved to Regent's Park, a new home had to be found, and the Institute took up its abode at 50, Great Russell Street—immediately facing the British Museum. By 1914 the Institute had outgrown its accommodation; the library had overflowed its shelves and shelf-space; the meeting room served its purpose rather indifferently, and was neither commodious nor really convenient. The accommodation and conveniences for the officers of the Institute were cramped, nor could we pay salaries commensurate with the services which were rendered, owing to the stringent condition of our finance. In 1914, then, the Council was unanimously of opinion that the Institute must be housed in keeping with the Empire for which it has worked and is working—in keeping with the aims which its Fellows hold steadfastly in view, and in keeping with the needs of its library and of its staff. It was during this period that Mr. Edge Partington rendered a great service to the Institute in placing the pamphlets of the library in order and in searching for a suitable place to form a permanent abode.

At that time, too, while walking along the lane or passage on the north side of the National Gallery, my eye was caught by a gaunt, dilapidated-looking building which, from its central position, seemed, if put into repair, to offer the possibility of a new and suitable abode for the Institute. I did not know then, that the building I had inspected was very near to 4, St. Martin's Place,<sup>1</sup> where our schismatic predecessors met and quarrelled in the distant 'sixties. Presently, however, builders appeared on the scene; an austere, substantial edifice gradually appeared on the site. It became a fashionable club—presently visited by the police and notorious. One can smile at the incident, but through tears. Here are we, a body of men laying a sure foundation for a knowledge of the races of mankind—of our own race and of our fellow races—studying the conditions and customs under

<sup>1</sup> See Mr. A. L. Lewis's note appended to this address.

which we and they live, unravelling the past so as to discover how and when they and we have come to our present status, and yet the giddy throng could find with ease the ways and means to finance an enterprise which we hardly dared to undertake.

I mention those matters because peace will come, and when we have settled down once more the Council has again to find an answer to the question : How can the Institute best serve the needs of Anthropology ? Speaking not as your President, nor as a member of the Council, but simply as a Fellow, I think its first charge is to maintain its publications. The Institute has to provide the men who garner the needed knowledge with a ready, prompt, and efficient means of preserving and disseminating their hard-won observations. Six months is too long a period to make them wait for the appearance of their work : by the time proofs have arrived their interests have probably shifted to a new subject. Only the best should be selected, but there must be no stint of illustration. If I were asked to show what the Institute has accomplished, I would point to the *Journals* on the shelves—a record from 1844 to 1917. What would we give for a similar record which had been kept in Rome in the days of the Empire ?

After our publications, the library. But an efficient reference library requires money and a skilled librarian. In order of importance I would then place our meetings. At a meeting there must be provided something more than a mere dry, descriptive, record of fact. Scientific meetings have been killed by the supposition that the spoken communication and the printed record are the same. They should differ as much as the page of a play does from that of an encyclopedia. We write for reference—to obtain a permanent record ; we speak or show specimens, to convey the broad idea of what we have tried to do and how far we have succeeded in attaining our end. The discussion which follows should show how far we have observed accurately and thought correctly. Out of discussion and opposition should spring zest for further endeavour.

I would give a high importance to the work which the Institute has done and is doing to co-ordinate collective efforts. I have already mentioned the initiation of a scheme in 1875 which had as its ultimate aim a survey of the physical condition and bodily characteristics of the people of the British Isles—a scheme which will ultimately become a survey of the peoples of the British Empire. But I have not mentioned how this scheme was revived and extended by the Institute in 1905 and later—particularly by two men whose too-early death every one of us still regrets—Professor D. J. Cunningham, who died in 1907, and Mr. John Gray, our Treasurer, who died two years later. We have, as you may see from the Council's report, taken that scheme up again and hope that under changed circumstances it may soon become a Government measure. If time had permitted, I should have laid before you certain proposals which Professor Fleure wishes the Institute to take up in connection with that survey. When the present scheme has made further progress, I hope that Professor Fleure's suggestions will be taken up by the Institute. Then there is the Ethnographic Survey, which we

have worked for in past years. At the present time Mr. Harold J. E. Peake is carrying out a survey of the "finds" relating to the Bronze Age in Britain; that cannot be accomplished single-handed: he must have all the co-operation the Fellows of the Society can give him.

Then if I were asked what should be done to help on our work throughout the Empire—throughout the world—I would suggest, in the first place, that every traveller, be he Governor, sub-lieutenant, or merchant, should be provided with a copy of our *Notes and Queries*. But if that traveller were really in earnest in the search for the best way to increase anthropological knowledge, I should refer him to the most illuminating guide that lies within my knowledge. It is a long report, written in 1913 by one of our most distinguished Fellows—Dr. W. H. R. Rivers—addressed (by request) to the Carnegie Institution of Washington, on "The Present Condition and Future Needs of the Science of Anthropology." It is a document which should be in the hands of every Fellow of the Institute, for it defines not only the areas where anthropological observation is most sorely needed, but lays down the rules which must guide the observer if he would serve the purpose which this Institute has in view.

The Institute must encourage and welcome not only collective effort, but also individual effort. A new and fertile idea may leaven masses of facts which are otherwise barren. I know of no more interesting development of a fertile idea than that which has been forced on our notice by Professor Elliot Smith. The genesis of the idea lies open to us; there is first the years of residence in Egypt with a study of ancient Egyptians and their burial customs; then the recognition of a direct relationship between the ancient Egyptian tombs and Megalithic monuments; then a study in the migrations of culture.<sup>1</sup> Later, in conjunction with Mr. W. J. Perry and Mr. J. Wilfred Jackson, the application of a method which I believe to be new—the recognition of a cultural drift by groups of associated characteristics. Such groups of associated arts and customs we cannot conceive to have originated in more than one centre.

If you would seek for a recent instance of what individual effort can do for Anthropology, I do not think you could find a more striking example than in the three works produced in quick succession by Captain T. A. Joyce—*South American Archaeology*, *Mexican Archaeology*, and *Central American and West Indian Archaeology*. As the author of these three works he has placed all anthropologists under a deep debt to him.

There are certain other schemes which this Institute has steadily sought to further—schemes which will require the closest attention in the future. On every occasion this Institute has pressed the claims of Anthropology for a place amongst the subjects fostered and taught at Universities. It has seen Oxford and Cambridge and London Universities become centres of anthropological research; it has seen its introduction to many of our other Universities. The more those University

<sup>1</sup> For a full list of the literature of this movement, see *Ships as Evidence of the Migrations of Early Culture*, by G. Elliot Smith, F.R.S., Manchester University Press, 1917.

centres prosper the greater will be the progress of our knowledge and the greater the prosperity of our Institute. I have heard Sir Everard im Thurn and Sir Baldwin Spence say that it was Sir Edward B. Tylor's influence at Oxford that turned them to anthropological enquiry. They are only two of many, and what happened at Oxford thirty years ago must be happening now at all our University centres. Then, too, a new and great centre for the dissemination of the kind of knowledge we are in the closest sympathy with, has been just opened—"The School of Oriental Studies." When I think of what is happening in all of those centres I take a most optimistic view of the Institute's future.

Then there is the establishment and maintenance of a just and advantageous relationship between the Institute and administrative departments of our Government. We have had occasion several times in recent years to approach the Government—for the establishment of a Bureau of Ethnology; for the institution of an anthropometric survey of the people; for the application of anthropometrical methods to school children—but I cannot say that those in authority have shown an intelligent sympathy with either our efforts or our aims. In these present times values are changing rapidly and we must persevere. Sir Richard Temple<sup>1</sup> was in the right when he declared that our rulers must be made to perceive "the administrative value of Anthropology." Its value is being realized, and will be more and more as time goes on and experience tells. Our representations and advice given long ago by the Institute have borne fruit in the great Anthropological surveys carried out by the Indian Government in recent years. Nor can I omit acknowledging the great debt we owe to a lamented past President, Sir Herbert Risley, for his pioneer work in connection with the Indian Census.

I cannot close this address without referring to the great loss this Institute has sustained in the death of Sir Edward Tylor. He was twice our President and we recognize him as the Master Anthropologist of our time. All that he was and did, are just what this Institute would like to treasure and foster. Nor can I fail to mention the death of Mr. Charles Dawson, who has taken part in our proceedings. His name will be associated for all time with one of the most important discoveries ever made of fossil man. He was a student in the best sense of the word; his great discovery came to him—not by a turn of chance, but by intelligent anticipation and by persevering seeking.

I cannot leave this Chair without returning thanks to all Fellows of the Institute for the sympathy and help they have always extended to me. In olden times the Honorary Secretary had the title of Director; that is really his right designation, for the direction of our affairs and success in their management depends chiefly on the Honorary Secretary and Assistant Secretary. I have had the good fortune to be associated, first with Capt. T. C. Hodson and Lieut. E. W. Martindell, and subsequently with Dr. H. S. Harrison, Lieut. T. A. Joyce, and

<sup>1</sup> Presidential Address to the Anthropological Section of the British Association, Birmingham, 1913.

Miss Martindell. I take this opportunity of expressing to Miss Martindell the thanks of the Institute for the able manner in which she has carried out the duties of Assistant Secretary, in place of her brother who still remains on active service. I owe to my colleague, the Treasurer of the Institute, Mr. R. W. Williamson, more than I can find words to express. He has just presented us with a cheering balance sheet. I also avail myself of this opportunity to announce that the Trustees of the Institute are now: His Grace the Duke of Abercorn; Sir C. Hercules Read (your President-elect), and Sir Everard im Thurn, K.C.M.G., C.B. I hope that at an early date some good friend of the Institute may load the burden they have to bear—the burden of our funded stocks!

NOTE.—I take this opportunity of acknowledging my indebtedness to Sir Edward Brabrook, Mr. A. L. Lewis, Mr. J. Frederick Collingwood, Mr. Edward Clodd, Sir C. Hercules Read, Dr. Wood-Jones, Captain T. A. Joyce, and Dr. H. S. Harrison for suggestions and corrections.

Mr. A. L. Lewis gave me the following note on 4, St. Martin's Place:—

"No. 4, St. Martin's Place, was not on the north side of the National Gallery, it was rather at the north-east corner, being in that part of the main thoroughfare which was pulled down to make way for an extension of the National Portrait Gallery which now occupies its site. That was the reason for the Societies leaving No. 4. The first floor front was a large room with three windows, used by the Royal Society of Literature as a library and meeting room, and also by the Ethnological Society and Anthropological Society, but as a meeting room only. There was a room above it of equal size, but not so lofty, which was the Anthropological Society's Library, Council Room, and Museum. At the back of each of these large rooms was a smaller room. I think that at the back of the meeting room on the first floor was used by the Ethnological Society as a library and lumber room; that at the back of the large room on the second floor was used by the Anthropological Society as a Secretary's office."

To complete the story of No. 4, St. Martin's Place, I take the liberty of adding some verses published very many years ago by Sir Edward Brabrook.

"On Tuesday night I shall be found  
 At 4, St. Martin's Place, sirs,  
 Where we discuss, on neutral ground,  
 The problems of our race, sirs,  
 O do not ask me if I can throw  
 A light on the impiety  
 The Fellows utter at the Anthro-  
 pological Society."

## ANCIENT ROYAL HINDU MARRIAGE CUSTOMS.

By PANDIT VISHWANATH, with notes by H. A. ROSE.

It is said that once upon a time there was a great festival among the gods. At this festival was present a king, named Mahábhisha, who had attained to heaven by performing great sacrifices and austerities. A gust of wind blew aside the clothes of Gangá—the great goddess among rivers—and exposed her body. All the gods bent their heads so that Gangá should not feel ashamed, but Mahábhisha did not do so. Upon this Brahma was wroth and cursed Mahábhisha, saying that he should fall from heaven. Gangá, too, was ordered to be born on earth, to punish the king by so acting as to inflict great mental suffering upon him until he felt a great anger, which was to free him from the effect of the curse. In the fullness of time Gangá was born on earth and sought marriage with King Pratípa, who was renowned for his piety. He refused to wed her, but seeing her great beauty of mind and body promised to mate her with his son. Pratípa and his queen then underwent severe purificatory rites so that their child should be born good and noble in soul and in due course Mahábhisha was born as their child. They named him Shántanu—"son of the peaceful"—because of the perfect control over desires and passions to which his father had attained. When Shántanu had grown into a fine youth his father, according to immemorial Hindu custom, prepared to relinquish a householder's life and retire into the forests (*vana prastha*). He seated Shántanu on the throne, and retiring from the world, told him of his interview with a celestial maiden in which he had promised that a son of his would accept her as his wife. The old king exhorted Shántanu to redeem his father's promise, should he happen to see the maiden, and marry her unconditionally.

One day while walking along the bank of the Ganges, Shántanu saw a lovely girl, fell in love with her and asked for her hand. She consented on condition that he should never question her actions, and that should he ever interfere with her freedom to do what she pleased she would desert him at once. The king was so infatuated that he accepted her on these terms. They were married and in due course had a son. The queen flung the child into the river, telling Shántanu that it was for his good that she did so. Six more children were born, and one after the other were thrown into the river by his wife. Despite his grief he would not bid her desist from her murderous conduct lest she should leave him.<sup>1</sup> But when the eighth

<sup>1</sup> The eighth child is unlucky, as it portends death to its mother's brother. Kans was warned that he would perish at the hands of the eighth son of Devaki, wife of Vasudeo. He

child was born and his wife was going to kill it he could stand it no longer, and bade her refrain from its destruction. On hearing this the queen did not throw the child into the river, but told the king that she would live with him no longer since he had violated the condition on which she had married him. She then declared who each of them had been in their previous lives and said that the sons whom she had borne were the eight *rāsas*. These gods had stolen away the Nandini cow—the giver of all desires—which belonged to a great *rishi*. The leader of this party of divine thieves was Dyán. The *rishi* by his curse had doomed the *rāsas* for their misdeed to fall from heaven and be born on earth. This was their doom, but the thieves went and begged the *rishi's* forgiveness, and at their entreaties he so far relented that seven of them won permission to return to heaven within a year of their birth on earth, but Dyán, the chief offender, was not forgiven, and was condemned to a long terrestrial existence for his sinful conduct. He became the eighth child, which was saved by Shántanu's intervention. Gangá brought this child with her back to his father after training him in every branch of worldly and spiritual knowledge. He was so well brought up that his strength, energy and intellect became the envy of contemporary princes. His love and respect for his father were no less exemplary, and he gave striking proofs of them in this wise:—One day his father, while roaming along the banks of the Yamuna, saw a beautiful girl, a fisherman's daughter. The old king was so smitten with her looks that he sought her for his wife, but her father refused his consent until the king promised that her progeny should succeed to the throne after his death. The aged king was in a dilemma, between his love for this fisher girl and his recognition of the claims of his son by Gangá. At last he decided to subordinate his passion to his sense of justice and returned to his capital. He could not, however, forget the fisherman's daughter altogether, and continued dejected and morose because of his unfulfilled desire for her. His son noticed this and tried to ascertain through the minister the cause of his father's sadness. On hearing the truth he went to the fisherman and voluntarily pledged his word not to claim the throne after his father's death, but to help any stepbrothers who might be born to his daughter to secure it. The fisherman said that he fully trusted the prince to keep his word, but what if the prince's own offspring claimed the right to the kingdom against his daughter's progeny? On hearing this the prince, whose name was Davabhrata, vowed that he would never marry, so that there would be no sons to stand in the way of his stepbrother's inheritance. It is said that the gods in heaven rained flowers upon the prince, who came thenceforward to be known as Bhishma (the terrible) because of his vow.

The fisherman's daughter, whose name was Satyavati, then wedded Bhishma's father, and had two sons, Chitrangad and Vichitravirya. On the death of Shán-

resolved to kill Vasudeo at once, but was dissuaded from so doing, and instead he slew all Devaki's first six sons, one by one, an excess of precaution which did him no good whatever, for Krishna, her eighth son, killed Kans : *Myths of the Hindus and Buddhists*, Sister Nivedita and Ananda Coomaraswamy, pp. 219 f. and 237.

tamu, the elder of the two minors, as they still were, came to the throne. Bhishma acted as their protector. Soon after his accession Chitrangad was killed in battle and the younger boy succeeded him. The mode of winning a wife at that time amongst Kshatriyas was that called a *swayamvara*, or "self-choice."<sup>1</sup> Kings and princes used to be invited by the bride's father to his capital, and they displayed their skill at games and their prowess in arms, and performed great feats of strength. The bride witnessed them all, and chose him who pleased her most. Vichitravirya was too young to take part in such a competition, but his mother being eager to see him married, Bhishma took upon himself the task of finding him a queen. At a *swayamvara* he carried off by force three daughters of the King of Káshi, challenging all the assembled princes to wrest the girls from him if they could. This they failed to do, but the eldest of the three princesses told Bhishma that she had already made a mental vow to wed another prince, so Bhishma let her go. The other two, Ambiká and Ambaliká, were married to Vichitravirya, but unluckily he died soon after his marriage, and the royal house of Shántanu was threatened with extinction.

In great grief Satyavati next implored Bhishma to espouse the widows<sup>2</sup> of his stepbrothers, but he refused to break his vow of celibacy. He advised her, however, to obtain progeny from the widowed princesses by the performance of *niyoga*—a practice permissible in emergency, though not accorded recognition as an ordinary course of social conduct. It consisted in inviting some great sage to become the father of children who, being born of a widowed queen, were to be considered the offspring of her dead husband. Satyavati then informed Bhishma that before she married his father she had had a son by a great sage named Parashar, whose name was Krishna Dváipáyana Vyása, who had promised to come to her aid in any difficulty the moment she thought of him. She did so now, and Vyása appeared. With considerable difficulty he was persuaded to beget children on the widowed princesses. He was so ugly that he was called Krishna, "black," and as the princesses had to submit to his ugliness, they were excused a whole year's purificatory penances, as their toleration of Vyása's ugliness was in itself a penance. Thus the queen mother with great difficulty persuaded her daughters-in-law to receive Vyása for the sake of the royal line, which was threatened with extinction. The elder at the sight of his repulsive figure closed her eyes and did not open them all the time that he was with her. For her Vyása predicted a blind son. The younger, seeing how horrible his appearance was, turned pale with fear, and to her, therefore, was born a child with pallid complexion named Pandu the "pale." The queen wanted a third child, but her elder daughter-in-law evaded her wishes and sent one of her maids, to whom was born the saintly Vidura, because of the sweetly reverent attitude in which the maid received the great sage.

Bhishma superintended the education of the boys, who developed great skill in learning and sports. In due course Pandu was made king, because his elder

<sup>1</sup> See Note B.

<sup>2</sup> See Note C.

brother Dhritarâshtra was blind. Pandu married two wives, Kuntî and Madrî. Once while out hunting Pandu cruelly shot a stag which was coupling with its mate. This piece of cruelty brought upon him the curse that he would die at once if he lived with either of his wives. On this Pandu was very sad and went to live in the jungles, where his wives followed him. After a time he began to long for children, and told Kuntî of his longing : she said that she knew a *mantra* whereby she could summon any of the gods to come and give her children. Pandu gave her leave to use it, and as a result she called upon Dharma, god of Justice, Vâyu the Wind, and Indra the king of the gods, and they gave her Yudhishtira, Bhîma, Arjuna respectively. She also taught the *mantra* to Madrî, who summoned the twin Aswins, and they gave her Nakula and Sahadeva. It may be noted here that before she married Pandu, Kuntî had had another divine son, Karna, from the sun, and he fought against the sons of Pandu in the Mahâbhârata. As a result of the curse, Pandu died while embracing his wife Madrî, and she gave up her life along with her husband, leaving her sons to the care of Kuntî.

## II.—The sons of Pandu when exiled, and disguised as Brâhmans, attend the *swayamvara* of Draupadi, whom they win and make their common wife.

King Drupada had heard much of Arjuna's skill as an archer and wanted to give him his daughter Draupadi in marriage, but he also wished that she should be won in a *swayamvara*. He made a great bow which he thought none but Arjuna could bend, and placed on a lofty pole a revolving fish whose eye was to be the mark. He who could hit was to marry his daughter.

A great crowd of kings assembled for the contest, but all failed to bend the bow. Then Karna stepped forward and strung it and took aim with an arrow. Just as the Pândava brothers, who had so far not come forward and were disguised as Brâhmans, were giving way to despair, Draupadi spoke in clear accents :—"I will not take a low-born man for my husband." At this Karna put down the bow and went away, but Arjuna came forward looking like a Brâhman, lifted the bow, drew it, and hit the mark. Flowers rained from heaven, and Draupadi put a garland of sweet flowers round Arjuna's neck as a sign of her choice. The crowd of kings protested that a Brâhman must not carry off a Khshatriya girl and fought for her possession, but the Pandavas defeated them all and carried the bride home.

When they reached their house they told their mother, who was in the inner room, in jest that they had brought home the day's alms. She answered "enjoy it in common." But when she knew the truth she was filled with remorse, and when her eldest son came home, bade him decide the matter by suggesting some way whereby her words might not be proved false and at the same time undesirable results might be avoided.

Yudhishtira then remembered a prophecy that Vyâsa had made concerning Draupadî, who in her former life had five times besought Mahâdeva for a suitable husband and each time had been granted her request, so that she was due five

husbands. So the decision was that she should remain the common wife of all the five brothers.

#### NOTES BY H. A. ROSE.

A. The first question raised by this interesting paper is : " Does it represent the ideas which regulated ancient Hindu society as a whole ? " I am strongly inclined to think it does *not*. It is now beginning to be realized that ruling families were often constrained by " reasons of state " to place themselves above all popular rules or codes of ethics and evolve a moral law peculiar to themselves. This has been shown to be the case among the Jews, the Egyptians of the New Kingdom c. 1000 n.c., and the Ptolemaic period, the early Roman emperors, and the rulers of Travancore. The latter is an exception, but only apparently so. According to the usages of the Nairs of the Western Coast, descent in the ruling family is in the female line, and if that line fails the Raja does not adopt males, but females through whom the line may be continued. Each Raja's heir is his sister's son, not his own son.<sup>1</sup> I can find no express mention in any account of the Nayars of this rule as to the chiefs' succession, nor does it appear to be the rule among the mass of the caste.

B. As the king's daughter was thus destined to carry on the royal line, the important thing was that she should have issue, and her marriage was a matter of quite secondary importance. This may explain the *swayamvara*, which allowed her not only to choose her husband, but possibly also any man, to be the father of the heir to the throne. The only limitation on her choice of a husband seems to have been a rule that she must choose the winner in the tournament, if one was held.<sup>2</sup>

Royal descent often followed the female line in ancient India. In the *Karpura-Manjari*, "Camphor-cluster," a drama of the 10th century A.D., Chandapála marries that lady, the daughter of the Kantala king, and thus becomes a paramount sovereign.<sup>3</sup>

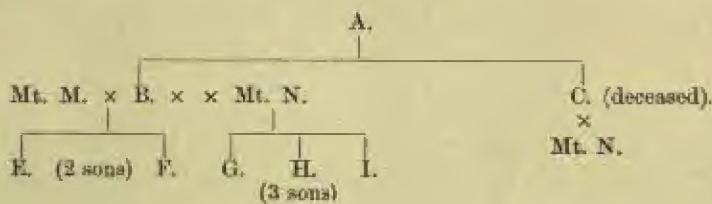
C. It will be observed that in this episode there is no question of marrying the deceased brother's widow, but of the *levirate* in a strict sense of that term ; that is to say the king raises up issue to his dead brother, but the widows do not become his wives. Presumably then their sons are regarded as the heirs of the deceased,

<sup>1</sup> M. Murray, in *Journ. R. Anthropol. Inst.*, 1915, p. 307, quoting from Aitchison's Treaties, etc., V, p. 422 ff. This passage does not appear to be cited by E. Thurston, *Castes and Tribes of Southern India*, V, p. 283 ff., under Art. Nayar.

<sup>2</sup> Among the Bázigars of the Punjab, when a girl is marriageable, an athletic competition is held, and the competitors jump, run, and so on. The winner has a right to marry the girl, but she has no choice.

<sup>3</sup> *Karpura-Manjari*, Cambridge, Mass., N.S. A, published by the Harvard University, 1901. Reviewed in *Calcutta Review*, 1903, p. 274.

not of their real father. This suggests an explanation of the *chundavand* rule of inheritance.



If B married N, his brother's widow, all his sons by her would be as much his sons as E and F, his sons by his first wife, and all five sons would inherit equally by *pavrind*. But if he merely raised up issue to C by N, her sons would be regarded as heirs of C, not of B, and they would only get C's half of the family land, E and F getting B's half, not  $\frac{2}{3}$ ths, and we should at once have what looks at first sight like a custom of *chundavand*. If custom were studied scientifically, nothing being taken for granted, but every possible explanation tested by the facts, the facts being all completely elicited by inquiry, we should first ascertain who B's second wife was. At present all that can be said is that it is not very common for a cultivator of a caste like the Jâts to take a second wife unless his brother die leaving a widow, and then he often marries her, even if he has a wife already. So common is this form of widow re-marriage that the word '*devar*' means "other," or "second husband."

It need cause no surprise to find the two ideas or practices, (i) of taking the brother's widow to wife, and (ii) of raising up seed to the dead brother by her, existing side by side and often confused by such a class as the Jâts, because the distinction is rather a fine one, and we know that both ideas are to be found in India.<sup>1</sup>

<sup>1</sup> *Devara* is thus explained in the Vedic Lexicon called *Nirukta* by Yaska, which is regarded as an authority by Sanskrit scholars of the old school:—*Devaro, dvitio waru uchyate, "Devara is said to be the second husband."* *Devara* in modern Sanskrit and Indian vernaculars means the husband's younger brother.

## THE TATI BUSHMEN (MASARWAS) AND THEIR LANGUAGE.

By REV. S. S. DORRAN, F.R.A.I., F.R.G.S.

### I.—THE PEOPLE.

THE people called Masarwas by the Bechuanas inhabit the Bechuanaland Protectorate, the Kalahari, and the portions of Southern Rhodesia adjoining these territories. They probably extend into "German" South-West Africa, and possibly also across the Chobe River into Portuguese West Africa. Whether they are to be found in the eastern parts of Southern Rhodesia, and the adjoining territory of Portuguese East Africa, is uncertain. There are certainly Bushmen in these countries, a few are left in the Victoria and Sabi districts, but whether they are Masarwas or other Bushmen, I cannot say. I could get no information from Europeans or natives who had seen them beyond the fact that they were Bushmen. Amongst the Masarwas themselves little could be gleaned. They always said that most of the tribe dwelt to the west and north-west, though they admitted that many dwelt to the south from the Matopos to the Crocodile River, more especially in the Tuli district. Amongst themselves they are never designated Masarwas, but always Hiechware, or people of the open country. Whether this was simply a name indicative of their mode of life, or one adopted through the influence of the Bechuanas, I could not discover. I could never learn from them that they had any other name. The origin of the name Masarwas will be discussed later.

The Bechuanas call the northern Bushmen *Masarwa*, while those south of the Orange River are called *Barwa*. Thus *Masarwa* is a general term for Bushmen of the north. As most of those dealt with in this paper are from the Tati district, and north towards the Zambezi, it would be as well to speak of them as Tati Bushmen. The Bechuanas say that they call these people *Masarwas* because they came before them, and lived on meat. Therefore, the name would mean meat eaters or hunters. I do not know any word, however, in the Sechuana language from which it could be derived. Amongst the Matabele the *Masarwas* are called *Amasile*, which I am informed is derived from an obsolete word, *ukusila*, to live, or to live by hunting, and, therefore, *Amasile* would mean hunters.

The people of the Congo Basin call the Pygmies Batwa, and most likely the term *Barwa*, *Abatwa* was supplied to the Bushmen by the Bantu negroes, when they first arrived south of the Zambezi, as they looked upon them as the same people as the Pygmies. I do not think there is much doubt that the Pygmies and

Bushmen are closely connected, probably originally the same people, and the difference in colour and habits of life are due simply to difference of habitat, environment, and mode of living, the one being forest dwellers, and the other desert inhabitants. A carefully prepared vocabulary of one or more Pygmy languages would probably show considerable resemblances to some of the Bushman languages.

They are a branch of the peoples collectively known as Bushmen, and both morphologically and linguistically have most of the characteristics of these peoples. That the Bushmen tribes had once a much wider diffusion in South and Central Africa in former times is no longer questioned by ethnologists. Remnants remain in out of the way places, and traces of their former occupation of the continent are to be found all over the great central plateau. They are the true aborigines of South Africa, using that term, of course, with regard to the Hottentot and Bantu tribes. The Bushmen always tell one that they were here long before either Kafir or Hottentot had appeared, that there were no others than themselves, and that this state of things continued for a very long time. Consequently, the Masarwas claim to be as ancient as the other Bushmen tribes.

The Masarwas probably belong to several small tribes,<sup>1</sup> as there are various peculiarities and differences in the language as spoken by people from different portions of the country inhabited by them. These differences do not amount to much, not enough to constitute different dialects, but they show that the process of dialect formation is going on.

The Masarwas live mostly in the territory of the Bechuanas, or Khama's country, and they are employed to some extent by the chief and his people as cattle herds, trappers and hunters, but receive no other wages, or special remuneration that I could learn of. The Masarwas of the Sansokwe River, Southern Rhodesia, came with the Bechuanas from Motloutsi, and are sometimes spoken of as tame Bushmen. They are given charge of the flocks and herds, and are often sent long distances out into the desert. They are held responsible

<sup>1</sup> Since the above was written I have been informed by an intelligent Mochuana, who has spent much of his life with the Masarwas, that there are three main divisions of the people:—

1. Those called by the Bechuanas Mapani, tall and black or deep brown, who inhabit mostly the dry mopani forest in Southern Rhodesia and the Bechuanaland Protectorate. They live in huts of branches covered with grass. The Sansokwe people are partly of this division.
2. Those called by the Bechuanas Amathabane, large or small, brown or black, with a reddish tint, who mostly live on or about the Botletle River, and even as far east as Wankie district, and west to Lake Ngami and beyond.
3. Those called Baduruwane by the Bechuanas, small and black, who live in anthills, which they dig up for the grubs. They live along the Crocodile River in Rhodesia and the Transvaal. They are very wild and fierce and practically naked. Their language is so strange that my informant could not understand it, though he could speak the language of No. 1 and partly that of No. 2. It struck me that he was referring to the people called Katte, or Vaalpens, and I inquired if he had ever heard them called Katte, but his answer was in the negative. Very little is known of these people. Dr. Haddon referred to them in his presidential address to Section H of the British Association (South Africa), 1905.

for the safety and increase of the stock, and while these are in their charge are allowed to take the milk, and sometimes get a few goats for their hire, but that is all. They must, therefore, provide for their own wants as best they can. Hence stealing from their masters is not infrequent, and used to be punished with dreadful severity. "It is difficult for a Masarwa," said a Bechuana chief, "to keep from killing a cow now and then." It is certainly much less exertion than hunting. They are said, on the whole, to make faithful herdsmen, in spite of their penchant for ox-flesh, and to be very careful of the stock entrusted to their care. This is the testimony of European farmers and storekeepers who have employed them as herds. In fact, the Europeans prefer them to the Bechuanaas, perhaps because they are much more docile and more ready to take instructions. The Bechuanaas being cattle herds themselves, think they know all that is to be known of cattle keeping, and resent interference on the part of a European employer, so long as they carry out their duties. The Bushmen, on the contrary, have never owned stock, and consequently have to be trained to look after animals. They do not like to be employed to look after horses. In this respect they are unlike the Hottentots, who make good drivers and groomis, and take a pride in their beasts, whereas the Bushmen will not, if they can help it, groom horses. The Masarwas are certainly far more courageous in keeping off wild animals from the herds than are the Bechuanaas. They will fearlessly track a lion or leopard that has carried off an animal to its den, and endeavour to kill it. The Motloutsi Bushmen have a few goats and sheep. Their weapons are assegais, bows, and a few have old cap guns. They are very keen on the possession of a gun, and those that they have have been acquired from hunters of former times, or are cheap trade guns. With these they will attack almost any animal. They are much better shots than the Bechuanaas. Their assegais have iron heads, and seem to have been purchased from the surrounding tribes.

Livingstone, in the 'fifties of last century, found them in the northern and western portions of what is now known as the Bechuanaland Protectorate, and remarked on their large physical proportions compared to the other Bushmen round about them. The same remark was made by Mackenzie many years afterwards, who also alludes to their much darker colour than the ordinary Bushmen. Several other travellers have made similar observations. Neither size nor colour is distinctive, as we shall see, and cannot be used as a criterion of whether a man is a Masarwa or not. The Masarwas of the Sansokwe and Motloutsi Rivers are dirty yellow in colour, though many individuals are quite dark. Generally speaking they are taller than the typical Bushmen, in fact some of them are fine fellows, quite as tall as other Masarwas. One cannot help feeling, however, that they are true Bushmen, though with regard to some admixture of foreign blood, what has been said previously applies to them also. The Masarwas of the Wankie district seem on the whole to be less pure than those of the Sansokwe and Ramakwabane Rivers, but even amongst them there is great variation. The fact is, until quite recently there was much confusion in the use of the terms Hottentot

and Bushman. "If," in the words of Dr. Peringuey, of Cape Town, "a man was a bit more yellowish and dirty, and especially if he were a bit smaller than the average Hottentot, he was called a Bushman." Thus many so-called Bushmen were probably not Bushmen at all, but Hottentots or Bakalahari, who live under much the same conditions, though originally Bechuanas. In Bechuanaland at the present day the population is very much mixed. The Bechuanas themselves have some infusion of Bushman or Hottentot blood in their veins, and it increases the farther one goes west into the Kalahari desert. I have seen Bechuana children who had many of Bushman physical characteristics, yet they would have been most indignant if I had called them Masarwas. They were nothing, in their opinion, but pure Bechuanas. The Bechuanas are very sensitive on the colour question, and to call a Bechuana a Bushman would be the greatest insult, and if a Mosarwa did so, it would probably cost him his life. Formerly the Bechuanas treated the Masarwas with great cruelty, and in remote districts they probably do so yet. There is no love lost between the peoples, in spite of the spread of Christianity. Hepburn says that commandos were formed to hunt them down as wild beasts, and relates that on one occasion in the Ngami district twenty-nine were shot down near a European trader's wagons, and he was quite helpless to interfere. The Bechuanas cannot understand anyone taking the slightest interest in the Bushmen, or seeing anything in them to admire. Time after time the writer has heard them described in the following charitable terms: "The Bushmen are real snakes," "The Bushmen are inveterate thieves." I am not sure that the Bushmen are greater thieves than the Bechuanas themselves, or any other South African tribe. Anyone who has lived amongst the natives knows that no native tribe, at least in the old days, could resist the temptation to loot the cattle of its weaker neighbours, and even at the present time a great deal of petty stock theft goes on.

More humane methods are now adopted towards the Bushmen by at least their better enlightened masters. For a long time the Bechuanas resented the preaching of Christianity to the Masarwas, and to-day there are practically no Bushmen among the Church members. It must be frankly admitted that the Bushmen have small interest in Christianity. They are too unsettled and wayward in their manner of life for any real or permanent impression to be made upon them. When I inquired why they were not at church, the answer I got was, "They are out at the cattle posts," whereas I found that many of them were loitering about the villages, evidently unwilling or afraid to come to church. At the beginning of my inquiries what information I got was not from the Masarwas directly, but from two Bechuanas who had spent their youth amongst them as cattle herds. They had thus acquired their language, and had some knowledge of their habits and customs. Eventually I overcame the reluctance of the masters, and was allowed free access to the Masarwas. The Bechuanas were frankly surprised that I was not afraid of the Bushmen, as many of them emphatically are. I have never seen anything to be afraid of in these people, so long as they were fairly and honourably treated.

What is the meaning of the name Masarwa? It is an interesting question, and may be discussed at this stage. Amongst the Basutos the Bushmen are called *Baroa*, pronounced *Baroua*, a name which may mean "men of the south," from *boroa*, meaning the south. No other term is applied to them so far as I know. I think this term originated amongst the Bushmen themselves, and was taken over by the Bechuanas. This is not, however, the opinion of the Rev. E. Jacottet, of Basutoland, an authority on the Bantu languages. He considers that it is a Basuto term, and used in a geographical sense. What the derivation of *boroa* is we do not know. Amongst the Kafirs and Zulus the name Barwa assumes the form Abatwa, according to the law of consonantal change in the Bantu languages. It is of widespread occurrence amongst the various Bantu dialects and languages of South Africa. It is of no recent origin, as is shown by the fact that on an old map the country round Delagoa Bay and northwards is called the "Country of the Butwa." In some parts of Southern Rhodesia, more especially in Mashonaland, the Bushmen are called *Wak Wak* by the Makaranga. This term has been something of a puzzle, and has given rise to all sorts of explanations. Some say it is a term of contempt applied to the Bushmen, and comparing their speech with its clicks and croaks to the grunts and barks of baboons. Others say it is a Somali word from Al Masudi, and was applied to the natives of the country by the Arabs. Burton, in his edition of the *Arabian Nights*, discusses the term as applied to Somaliland, and shows that it has travelled right round the world as the designation of one country after another, and therefore is of no geographical or scientific value.<sup>1</sup> I think there is another and a much more plausible explanation. It is simply a distorted form of the Bushman *Kwa* or *Kui* (a man); in the plural, *Kwa Kwa* or *||Kwa ||Kwa* (men). If pronounced rapidly, it would be quite easy to transform into *Wak Wak*, as the Makaranga would find it just as difficult to acquire any of the Bushman languages as a European. I am aware that Somaliland has been mentioned by some authorities as the probable home of the Hottentots, who are said to be Bushman half-breeds, but I am unable to see any good reason for the identification. It is also suggested that Masarwa is a pluralized form of Serwa, which is the designation in the Sechuana and Sesuto languages of the speech of the Barwa, and that the form arose through some misunderstanding or misinterpretation, just as in the case of *Wak Wak*. It would thus mean "the people who speak Serwa." Selous, quoting from Report of Transvaal Native Affairs Department, says, "The Bushmen living in the Valley of the Limpopo, in the Northern Transvaal, called Maserua are distinct from the ordinary South African Bushmen,"<sup>2</sup> and goes on to explain that the name is pronounced by the Bechuanas as Masarwa, not Maserua, with the r strongly trilled. He also suggests that the singular is Lisarwa. This is not accurate, as the singular is Mosarwa, the plural Masarwa, and the language Sesarwa. With regard to the difference in the spelling of the name, Masarwa is the Sechuana orthography and pronunciation, while

<sup>1</sup> *Arabian Nights*, vol. vi, p. 217.

<sup>2</sup> *African Nature Notes and Reminiscences*, p. 330.

Maseroa is the Sesuto. It would therefore bear out the suggestion that Masarwa is simply Maseroa. If this be the true explanation, it is something of a novelty in Bantu, and thus Sesarwa, or the language of the Masarwas, is a word with a reduplicated prefix. Apart from this explanation, I have no other to offer.

With respect to the origin of the people themselves, I do not think there is much doubt that they are true Bushmen, though there may be some Bantu or possibly Hottentot blood in their veins. I agree with what Selous says on this point, "On the whole, I am inclined to believe that the greater part of the Bushmen I have met were of pure race, with very little, if any, admixture of Bantu blood in their veins."<sup>1</sup> I also thought that the Masarwas were a composite race, with a large admixture of Negro blood, but subsequent inquiry led me to the belief that on the whole the race was comparatively pure, and that while there may have been some slight intermixture in the past, and probably more at present, there was no good reason to think the Masarwas were anything but Bushmen. Neither Hottentot nor Bantu Negro have had any influence on their language except in the matter of loan words, a phenomenon that constantly occurs in neighbouring peoples. No doubt many of the Masarwas have Negro characteristics, more especially in the shade of colour. This is usually darker than in the typical Bushman, but even it is not constant. I have met families of the brownish-yellow colour of the southern Bushmen, and even amongst these there were individuals of a very dark type. At first I was inclined to think from the depth of the tint that the Masarwas were not very pure, but I abandoned this opinion after a more extended examination of the people. In the remote past, when the Bantu tribes were steadily pressing down to the south of the continent, some absorption and admixture may have taken place, but as a state of war almost constantly existed between the Bushmen and their neighbours, I cannot think it was very great. The usual process was to wipe out the men and capture the women and children. These were kept as slaves and concubines, and would soon lose not only their individuality, but also their language. I cannot see how the commonly received theory regarding the origin of the Hottentots can be true. This assumes that some Negro tribe in the remote past captured a lot of Bush women and children, that these Negroes took them as wives, that the women still retained their own Bushman language, and taught it to their children. Thus the Hottentot language arose.<sup>2</sup> Now this theory assumes what I have never observed elsewhere, that the Negro husbands learnt the language of their Bush wives and so dropped their own. The very opposite seems to me more probable. The French refugees in England, Ireland, and South Africa very quickly forgot their French language when they settled down and intermarried with an alien people. As I belong to the Huguenots myself, I have had proof in my own family of the truth of this statement. And there is an example to be found amongst the natives of South Africa. The people now known as Tambookies<sup>3</sup>

<sup>1</sup> *African Nature Notes and Reminiscences*, p. 338.

<sup>2</sup> The Hottentot language is now classed as a North African Hamitic language.

<sup>3</sup> Stow, *Native Races of South Africa*, p. 170.

in Cape Colony were once Hottentots. They were conquered by the Amaxosa Kafirs, and they have lost their language, and now speak only Kafir.

In the past little miscegenation took place. The introduction of settled habits of life amongst the Bechuanas has led to unions generally of a temporary character, and this is practically all that obtains at present, and I do not think that the Masarwas want to be absorbed by their masters. They have a great love for their own free life, and show no particular willingness to settle down to an agricultural and pastoral life. Hence there is no real amalgamation between the two peoples: each remains for all practical purposes distinct. The Bushmen are certainly nearer the Hottentots than the Negroes, and this will be abundantly clear when we come to discuss their language and its position with respect to Namaqua and Bantu. Physically and linguistically the Hottentots and Bushmen were one people in the remote past, but they have lived so long apart that the degree of relationship, at least in the languages, is very slight.

In personal appearance the Masarwas are taller than the Cape Bushmen, and are quite as tall as the Bechuanas. Such individuals as I have measured ranged from 5 feet 2 inches up to 5 feet 9 inches. A few were below or above these figures, but the average height may be taken at 5 feet 5 inches. I have seen men quite 6 feet in height, but they were rare. I cannot say, however, that they appeared to be particularly muscular or powerful, the largest individual being 40 inches round the chest. The body is well nourished, rather lean than fat, and the skin is not so wrinkled as in the case of other Bushmen, except in very old men and women, more particularly the latter. Most individuals have abundance of hair on the head, and there are few or no patches of bare skin. The face is broad and flat, and the nostrils wide and prominent. Some individuals have lobes to their ears, some have not, while the eyebrows are fairly well marked. The jaws are not noticeably prognathous, but the point of the chin retreats, so that the face, seen in profile, is characteristically Bushman. The eyes are moderately sized, certainly not smaller than those of the Bechuanas, and I could not observe that wild and foxy look sometimes seen in other Bushmen. Unquestionably, when one examines their faces carefully, one sees that they are extraordinarily alert, and seem to notice everything without appearing to do so.

The hollow back and tendency to steatopygia is present in both men and women, but not markedly so. It is even present in young girls, and is a very fair indication of the type. The legs are thin, and well-developed calves are seldom seen, while the shambling gait common amongst the Bechuanas is quite absent, partly because they are better on their legs than the latter, and partly because the feet are smaller and the instep higher. Their hunting life has led to much better development of the leg muscles, and consequently to much greater powers of endurance. The beard is scanty, there is little or no moustache, and what hair there is is under, rather than on, the chin or cheeks. Their teeth are wonderfully white and sound, though in old individuals they become much worn—not remarkable, though, when one considers the tough character of their fare.

It is astonishing how clean they will pick a bone; no dog could do it much better. Broken teeth are seldom seen, and I never heard of any individuals complain of toothache, though doubtless they suffer from this complaint. They have no cicatrices or tribal marks on the cheeks or body that I could see, and, when questioned, said they had no such custom.

Their clothing consists of a moderate-sized piece of skin round the loins. Sometimes they have two pieces instead of one, before and behind. Even these are often dispensed with, and a small piece of skin or cloth is threaded on a string or sinew, and passed between the legs and tied in front. Where they live in villages amongst the Bechuanas, they adopt to some extent European clothing, which they discard on returning to their wild life. They seldom wear trousers, being usually satisfied with a shirt or jacket, or preferably an old overcoat. I have seen them wearing overcoats in sweltering weather, without any apparent discomfort. Neither men nor women wear any headgear in the hottest or coldest weather. They seem to feel no inconvenience. Europeans have informed me that they have given hats or caps when worn out to their Masarwa herds, but they never wore them, and presumably threw them away.

Both sexes wear ornaments of various kinds, such as necklaces, bracelets, or earrings. The necklaces are formed of small berries, beads, bones or teeth, or the claws and hoofs of small game, threaded on a sinew or a piece of string. The bracelets, where not cheap trade stuff, are made of hide or sinew. Nearly every man has one or more steinbok or duiker horns full of medicine or snuff strung round his neck. The earrings are simply pieces of wood or bone stuck in the ears. They are very fond of brass wire, or the keys supplied with sardine tins to open them, for this purpose. I have seen an individual with as many as four of these stuck in each ear. Leg ornaments, save for dancing purposes, are not worn. These are the hollow shells of a kind of wild bean or a piece of the skin of a springbok's ear, with a small pebble introduced to make most sound.

Where not employed as herds by the Bechuanas, their occupations are hunting or trapping game. They never, to my knowledge, even when living in the Bechuana villages, till the ground or assist their masters in doing so. What food they need is given to them by their employers, but when out with the cattle they must forage for themselves. Those not employed as herds purchase mealies and Kafir corn with game.

Out in the Desert the Bushmen gather considerable quantities of the *tsama*, or wild melon, which contains a large quantity of water, and though rather insipid, has been largely used by Europeans also, and has saved many a traveller from death by thirst. It grows in the drier parts of the Kalahari, and in some seasons is excessively abundant. A friend of mine trekked right across the Kalahari from Vryburg to Riet Fontein, on the border of German South-West Africa, and fed his cattle largely on *tsama*. They are most expert at taking wild animals, are quite fearless, and have immense patience. They will follow a wounded animal for hours, never allowing it to rest until it is quite exhausted and easily killed. As

trackers they are simply invaluable. Nothing escapes their notice: a piece of bent grass, an overturned pebble, or a broken twig is quite sufficient to tell them where the game has gone and how far it is off. They will keep on the spoor of a wounded buck for hours, usually without speaking a word, and then, when the animal is sighted, they will quickly point it out to the hunter. They certainly have learnt the art of being silent and noiseless, two indispensable things for a hunter. They are as wary as the animals they stalk. If they refuse to follow a spoor, it is quite useless to force them. They have a marvellous knowledge of the habits of wild animals, and to hear them over a camp-fire after dark, especially at food, describe the events of the day or some great adventure they have had with wild animals, is most interesting. They use bows with long reed arrows, tipped with a stone or metal point, but if neither of these is available they use a hardwood point. Such points as I have examined were made of mopani (*Copaisera mopani*). They are particularly fond of old nails to use as arrow-points, and I have heard of pieces of old bottles being used for the same purpose. The points are loosely stuck in the shaft of the arrow, and become readily detached in the flesh of the animal when the arrow is discharged, so that the shaft can be picked up and used again. For large game the points are permanently fixed to the shafts. The bows are kept permanently strung, and consequently lose much of their elasticity. Those that I have inspected were not above 3 feet long, and made of tough, though light, wood. The arrow-points are smeared with poison of a reddish or chocolate colour. It is sticky, soon dries, and adheres firmly. The composition of the poison, so far as I could ascertain, is as follows: (a) Snake poison, usually cobra or puff adder. (b) The juice of the Euphorbia (probably *striata*) or of the Bushman's Poison Bush (*Acocanthera venenata*).<sup>1</sup> The poison bags are extracted, dried, and pounded into dust, mixed with the juice of Euphorbia or Acocanthera, and repeatedly boiled until it acquires the requisite degree of consistency, usually that of thick jelly. I have heard that there are other ingredients such as poisonous spiders, caterpillars, and *Amaryllis distichia*, but I cannot vouch for the accuracy of this statement. Sometimes it is carried on the person in a small horn, but usually the arrow-heads only are carried by the hunter, the poison being left at home. They also use knobkerries, or throwing-sticks, similar to those in use amongst the Bechuanas. I imagine they have adopted the throwing-stick from the Negroes, and that it was not originally a Bushman weapon. With this they will knock down birds and small mammals, either sitting, flying, or running. They prefer to throw the missile at a bird just rising from the ground, knowing quite well that the slightest blow will upset the bird's balance and bring it down, when it is usually secured before it has time to escape. One Mosarwa, employed as a cattle-herd by a storekeeper whom I was accustomed to visit, never failed to bring home a guinea-fowl or a pheasant every evening. He was greatly pleased when I asked him to

<sup>1</sup> The Masarwas, as might be expected, have an extensive knowledge of the properties of various plants. Hence some of them are in great request as herbalists and doctors, and are rather feared on that account.

show me how it was done. They also employ snares and pitfalls for capturing game. The snares that I have seen were of the ordinary running-noose type. One end was firmly held by a cleft stick stuck in the ground, while the noose end was free and about 9 inches from the ground, just sufficiently high to catch a bird or a hare. Stronger and higher ones are required for small buck. The rope was made of grass carefully twisted. They also use pitfalls and traps. The pitfalls are circular in shape and narrow to the bottom, something like a funnel, with or without a sharpened stake fixed firmly in the earth. Any that I have seen could only have been used for comparatively small buck, not larger than a reedbuck, but I have heard of some constructed for the capture of animals as large as a sable antelope or a wildebeest. The traps were constructed very ingeniously. An oval stockade of fairly thick timber was constructed, narrowing at one end into a sort of pipe. In this pipe was a heavy piece of timber, usually the trunk of a tree. It was balanced carefully on the sides of the palisade, and firmly held down by a slight cord. As soon as an animal tried to force its way through, it trod on the cord and released the trigger, so that the log fell forward, either pinning the animal down or thrusting it into the stockade, where it was held a prisoner till killed or taken out. Sometimes two saplings growing opposite each other are selected, and one is tied down by a rope and held in position by a peg. Such a trap could only have been used for comparatively small animals. I have never heard of the Masarwas poisoning the water either of pans or rivers to obtain animals or fish, and I think the practice must be very rare, though other Bushmen are said to resort to it.

They weave nets to carry game and ostrich eggs. They are fairly close in the mesh, and the string is of bark or grass, and not of sinew. They are quite strong, however. A little coarse pottery is made, and where trading stores are within reach pots of European manufacture are much in request, as they last longer. They carry water in these pots or in ostrich eggs slung over the shoulder in the net. They also carry fire-sticks to make a fire when an animal has been brought down. The method of making fire is as follows: A short length of dry stick is held firmly between the feet of the operator, who squats or sits down. A much thinner piece of hardwood about a foot long, with a pointed end fitting into a notch in the lower, is rapidly twirled in the hands. In a short time fire is produced by the friction. They can endure thirst for a considerable time, but prolonged abstinence from water causes them great distress.

Their habitations consist of a few branches of trees stuck in the ground and laced together or tied together at the top, and covered with grass or skins. In Wankie and Ngami districts they use mats stretched over sticks. These are carried away when they remove. Such a shelter keeps out a certain amount of wind and rain, but when a spell of wet weather sets in they are very miserable, and are constantly obliged to shift their dwellings, as these get thoroughly saturated with water. All natives of South Africa seem to feel damp cold very keenly, and the Masarwas as much as any others. Dry cold

does not seem to affect them particularly. Prolonged rainy weather makes them quite helpless, as the game is much wilder and more difficult to kill, and they suffer severely from hunger; indeed, their normal life is either a feast or a famine, so far as food is concerned, and they are neither particular nor clean as to food. They occasionally take up their abode in caves and rock shelters, but, as one of them explained to me, they are not particularly fond of such places, as they invite the attacks of wild animals, and escape is much less easy from them in case of attack either by carnivora or men. They have learnt by experience that such places, while easily defensible, lend themselves equally easily to attack, and so, except in cases of extreme pressure, avoid them. Huts in the open, being of a flimsy nature, afford better opportunities of escape in case of attack. When the Masarwas lie down, they scoop out the earth, so that they may more conveniently go to sleep, and they invariably sleep with their feet outside the kaross, so that they may the more quickly make their escape if danger threatens.

They are mostly monogamists, though those of the Sansokwe are partly polygamists. A man will have as many as four wives or even more. Plurality of wives is largely a matter of wealth, and it gives a man distinction. This specially applies to the tame Masarwas. The practice is on the decline. King Khama strictly forbids polygamy in his country, so that it is quickly dying out. Amongst the wandering Masarwas of Khama's country it would be difficult to enforce such a regulation.

Feats of hunting prowess are usually regarded as of great importance in securing a wife. The prospective bridegroom betakes himself to the veld. If he falls in with a large animal, and particularly a dangerous one, so much the better. He immediately attacks and usually succeeds in killing it. He then flays the carcase, and taking the best part of the meat, returns to the girl's kraal, and presents it to her father. If it is accepted, and refusal must be exceedingly rare, the transaction is complete, and the man and woman simply go and live together. There is not much privacy in family life. They speak of the intimacies of cohabitation in a way that we think indelicate. All that can be said is that from our standpoint they are unmoral.

The families are not large: there are seldom more than three or four children, and childbearing seems to stop early, as one hardly ever sees grown-up and small children of the same family together. This may be explained by the fact that the children go off on their own account early. The wife carries the baby on her back, slung in a skin in the same manner as the other South African natives, while the elder children trot along by her side. If the boys are of a fair size they usually go with the father, who leads the way. The mother and girls carry the household gear (or, at least, what corresponds to such), some water, and one or two pieces of wood for making a fire. The father never carries aught except his weapons, and the whole family trudges along in comparative silence. I have seldom seen more than four families, numbering twenty-two individuals together, and this was a camp at permanent water. The young people are extraordinarily active and shy. I have

looked down on an encampment from a kopje, and have observed a few children playing about, but as soon as I showed myself they had all disappeared like partridges in the grass and bush. On one occasion I heard some Bushmen talking amongst some small rocky hills. I imagine they were preparing arrow-heads as the rocks composing these hills were a very hard and tough variety of diorite. They were keeping up an incessant hammering and a lively conversation at the same time. Cautionally I approached the place, but they evidently saw or heard me long before I was near them, for the noise abruptly ceased, and though I carefully searched the locality, I never caught sight of them. It is astonishing how silently they will glide away and how equally noiselessly they will approach to reconnoitre a stranger. At such times the women and children retire first to a safe distance and the men follow. The Masarwas have great self-control, and do not show their feelings readily. On meeting a Mosarwa for the first time one is struck with what one thinks is appalling rudeness. When asked a question such as "Where is the road?" "Is the water near?" a long insolent kind of stare is what one gets. The Mosarwa is taking the stranger's measure before he answers. He wants to make sure that the visitor is friendly. They have been so harried in the past that they are habitually on their guard. However, if anything excites their curiosity, or if they are intimate with one, they will talk volubly enough, generally in a loud tone of voice. They will often shout to each other over long distances, and carry on quite a conversation. When they meet, the usual salutation is *Kum bara*, good morning, and then follows, *Cha nam kho*, where do you come from?

The boys practise archery and throwing the knobkerrie at birds and small beasts, and become quite expert in its use. The ranges are, of course, short, but the aim is on the whole good. Even amongst the men the distance at which they use arrows is very short. I do not think the outside range can be more than 80 yards. The women and girls have to do all the work at the camp, and do not often get very generous treatment from the male members.

They are light-hearted, irresponsible, and careless. When they have plenty of meat they are extremely happy, and have a real good time while it lasts. I have been told that they pound up the meat with stones, boil it and mix it with fat, and then put it into skin bags, when it will keep sweet for a long time. The Bushmen of Basutoland have the same custom, and so may others. They are inveterate smokers and snuff takers, and prefer Makaranga tobacco to any other kind. This is very strong and acrid, but the stronger it is the better the Masarwas like it. The Makaranga pound up the leaf, and then mix it with honey into a kind of paste. It is then pressed into a mould and allowed to dry. It is sold in cone-shaped lumps, and the Masarwas usually exchange it for game. They not only smoke it, but make snuff of it as well. They also practise dacha or hemp smoking, in common with their Matebele and Bechuana neighbours. This is most deleterious, and produces violent coughing and constriction of the breath, as well as stupor.

They are exceedingly fond of Kafir beer, and contrive to get drunk whenever they can. As they grow but little Kafir corn themselves, they buy it from their neighbours for meat, and make it into beer. The corn is first sprouted, then dried and ground into a coarse meal, mixed with yeast and water and left to ferment, until the required degree of strength is obtained. To most Europeans it is tasteless, but the native thinks it simply delightful; and I cannot say that I found it particularly insipid when one gets used to it. On a hot day it is certainly most refreshing when drunk in moderate quantities. Nothing pleases a Mosarwa better than to give him some tobacco. He will rarely produce his pipe, but will carefully store it away in a small horn to make snuff of. Their pipes are usually bought at the nearest store, though I have seen a few of native manufacture. These were clay bowls with a reed stem, and had been sun-dried.

They use the *kipi*, or digging-stick, to unearth roots and tubers. This is usually the work of the women and girls. I have never heard of the men digging, or, indeed, doing anything except attend to their weapons and the chase. Such stones as I have obtained are about 4 inches in diameter, with a hole drilled in the centre, into which is inserted a tough, stout stick about 3 feet long. It was quite evident that the hole had been drilled from both sides of the stone, as it always narrowed towards the centre, and the drill had been of wood, with water and sand to form the cutting material. As the stick wore away the hole would get narrower. All stones that I possess are granite or sandstone, and they are quite common all over the country, and have been found far north of the Zambezi.

The Masarwas of the Sansokwe River still continue to paint, according to their own statements to me. There were at least quite lately three painters amongst this branch of the tribe, Nshimane, Boiyii and Chiyaii. They use red, blue or brown paints, made of clay mixed with fat. Sometimes they mix the clay with fat, and then allow it to dry like a stick of chalk. They first drew the outline with a burnt stick, and then filled it in with the paints sometimes laid on dry, but more usually moistened with water, or saliva, with a small brush made of ostrich feathers. These artists painted zebra, kudu, tortoise, and guinea fowl, and my informant, who had seen some of them at work, said it took about six hours to complete a set of pictures. Nshimane was a great rain doctor, and was held in high estimation. They knew of the existence of many rock paintings, and described to me the localities where they were to be found, and also gave me some details as to the paintings themselves. Some of these places I afterwards visited, and found their descriptions to be very accurate. When I inquired if the paintings were very old, the reply was, "Not so very old"; but I afterwards discovered this was rather an elastic way of indicating their age on the part of my informants. Some of these paintings are undoubtedly very ancient, while others are comparatively recent, and one cannot tell much from the appearance of a particular group of figures whether it is very old or not. The Masarwas did not know if any of the pictures had an allegorical signification. Personally, I am inclined to think that Bushman paintings as a whole have no such signification, but simply refer to the

ordinary life of the people. I know that assertions to the contrary have been made, but I think they are not warranted by the facts.

Paintings occur all over Southern Rhodesia, even towards the Zambezi, in the Lo Magundi and Mazoe districts. I have managed to secure photographs of some of the paintings indicated by an old man, as well as some from other districts and from Cape Colony for comparison. They are much the same as those I have seen in other parts of South Africa; some are better and some are worse. Much depends on the rock surface and on the degree of weathering. As many of them are in caves, they have been defaced or smoked over by the fires of subsequent occupiers. The colours are black, brown, red, and yellow, but generally only brown and red. Some of the animals are drawn with much spirit, but the artists invariably failed so far as the human figure is concerned, more especially with regard to the face. The figures are rather small, seldom more than 12 inches high, but I have seen some as much as 3 feet long and 2 feet high, but these were rare. The whole aspect and degree of excellence of most of these paintings remind one very forcibly of those of the Aurignacian age.

I have also endeavoured to ascertain if they knew anything of the old buildings scattered over the country in such numbers, a few specimens of which existed in the particular district where I happened to be at the time, but they could not throw any light on the origin of such structures beyond the fact that they had seen the Kafirs building such walls, and that any such walls that they had seen were built by natives not different from those now living in the country. "You know," said they, "the Makaranga lived in such places, and we never went near them or took any care of such things." I put the question: "Did the Bechuanaas build these walls?" "Very likely," was the reply. That was all I could get except that the buildings were old, how old they did not know. They had often slept in them in their wanderings. One particular mountain, Sekukwe, is covered with roughly concentric terraces and walls, and I questioned them about this particular example. "Oh yes, we know it well; we often go there, as it is our country," was the reply. "Did the Bechuanaas ever live there?" I queried. "We do not know; we never saw them," was all the reply I could get. From information supplied to me by both Matabele and Makaranga in Rhodesia I have arrived at the conclusion that on the whole Dr. Randall Maciver's theory of the origin of Zimbabwe and similar structures is not very far from the truth.<sup>1</sup> I do not see any necessity to import either Shemitic or other non-African influence. There is nothing in the buildings themselves that Negroes could not do; neither can I see much force in the temple theory or in the phallic cult as an explanation of their real use.

The Masarwas practise circumcision according to the Bechuana mode of performing the rite, usually with a stone knife. They circumcise the boys when they are about twelve or fourteen years of age. I inquired if they had the practice independent of the Bechuanaas, and the reply was in the affirmative. I think the

<sup>1</sup> Dornan, "Rhodesian Ruins and Native Tradition" (*South African Journal of Science*, July, 1916).

Bechuanas may have borrowed their present mode of performing the rite from the Masarwas, as the Basutos certainly have. One of the circumcision songs amongst the Basutos speaks of "the clever Bushmen, who first taught us how to perform the rite in a good manner," and the explanation given to me was that the Bushmen taught the Basutos a better method, as formerly they had many deaths as a result of the operation. I do not think it necessary to go into further details. They never, to my knowledge, cut off the joints of the little fingers. None that I have examined were so mutilated, either amongst men or women. They, however, knew that it was a Bushman custom, and common amongst some tribes. The Masarwas of the Sansokwe and Motloutsi Rivers are exceedingly dirty in their habits, and smear themselves with rancid fat so that they smell very high. They appear to wash very seldom, and hence skin diseases of various kinds are common. Syphilis is also very common, even amongst young people. One middle-aged man that I saw was a mass of sores. This is rather strange, as one does not often meet with the disease amongst the Bushmen of the desert, although it may be prevalent. Probably their more settled mode of life, leading to intermarriage, may have helped to increase it. I have never seen a case of leprosy amongst the Bushmen, nor have I heard of such; but amongst the Basuto, leprosy is called *Lefu la Barwa*, the disease of the Bushmen. Why it is so called I cannot ascertain. It may be that the Basutos got the disease from the Bushmen when they first came into Basutoland, or it may be only the habit that people have of ascribing to their enemies all their own most loathsome diseases. As a boy I heard rinderpest in Ireland called Russian murrain, as it had been brought from Russia at the time of the Crimean War. However, in the case of leprosy (as in the case of circumcision), I am inclined to think that the old Basutos may have found the disease amongst the Bushmen of Basutoland.

Malaria is also common amongst these Masarwas, but they seem to be less affected by it than even the Bechuanas. Measles and whooping cough are just as common amongst them as amongst natives and Europeans. The mortality amongst children is very high, mostly due to their insanitary habits, bad feeding and exposure, though those who survive are exceedingly hardy, and grow up healthy enough.

When death came to an encampment in former times the bodies of both men and women were dragged into the neighbouring bush, and there left to be devoured by the hyenas and vultures. Sometimes they were placed in the clefts of rocks and the aperture closed up with stones and branches, or put in a hole in the ground. This was the case if the deceased had been a person of some importance. Now they bury the dead with much the same ceremonies as the Bechuanas—that is, usually at the place where the deceased lived. They dig round holes about 4 feet deep, and the body is placed on its left side, with the feet doubled up. They also place in the grave of a man his weapons of war, and in that of a woman a few ostrich egg shells of water or meat. Occasionally the bodies are placed in caves and clefts of rocks, with the same ceremonies, and carefully walled up. I could not ascertain if they placed the deceased with his face to the rising sun, and whether

women were buried in the same way. They denied that they ever buried the dead in a sitting posture, as the Bantu natives usually do.

They certainly believe in some sort of immortality. They say that the deceased takes a long journey, and finally arrives at a certain place where he joins his ancestors. The whereabouts of this country they do not know. Some of them pointed to the north or the east, but this may have been due to the influence of the Bechuana belief. They say the man will find plenty of game, and that the sun will be very warm. I do not think they have any conception of a resurrection, at least not according to our notion of such. They think that the spirit leaves the body at death, and goes on its way. They are very unwilling to speak of death, or of those who have died, and avoid the subject as much as possible. I have not found definite traces of sun or moon worship amongst them, and why the sun is hot or the moon cold they do not know. They have no regular priests, only doctors who may act as such.

They believe in a spirit which they call *Zimo*, a modification of the Sechuana *Modimo* (God). They say he sends the lightning and the rain, makes the grass grow, and assists them in hunting. This word is generally used by those who have had considerable contact with the Bechuanas, but amongst themselves they have another word, *Thora*, for God. I have often asked them what it meant, but the invariable reply was Spirit. They say Thora is the lightning, or sends the lightning and rain, and sends trouble and hunger or plenty. I am of the opinion that their conception of Spirit is on the whole one of a malevolent tendency. Chapman<sup>1</sup> found the same word amongst the Bushmen of the Bottele River on his way to Lake Ngami and the Zambezi. He says, "Lighting on an old fellow who had held some intercourse with the Bamangwato in former times, and still retained a smattering of their language, we ascertained that they had at first mistaken man and horse for one being, a cannibal mounted on a god (*Torra*)!"

They are very much afraid of lightning. It is unusually vivid on the great plains of Bechuanaland, more especially at the beginning of the rainy season, when the storms are of great intensity, yet they did not seem to regard it as a bird, as the Bechuanas do. They knew quite well about the Bechuana belief, and I think it must have influenced them to a considerable extent, as they do not like the bird, and one individual supplied me with a folk tale, which explains their fear of the bird, and it is exactly what the Bechuanas would say. They do not know what causes thunder, and I could not discover that they connected it with lightning. They are well acquainted with the stars, and have names for various constellations, and believe that some of them are animals, such as the Southern Cross, which they call the Giraffe Star (*gabee khaine*). One old man pointed out to me how like it was to a giraffe standing in a certain position, but I confess I could not see it. I dare say, as in astronomy, one wants a certain amount of imagination to see the degree of resemblance of any group of stars to an animal.

<sup>1</sup> Chapman, *Travels in South Africa*, vol. i, p. 76 (1868).

They paid no special attention to the mantis that I could discover. They knew the insect well, but had nothing particular to say about it. They are much afraid of snakes, particularly the species of cobra known as the ringhals. They think that if this snake is seen about an encampment death will come very soon to someone in it. Yet, on the other hand, they will fearlessly attack and destroy snakes for the sake of their venom to make poison for their arrows. I never heard of any of them being bitten by snakes, or succumbing to the effects of snake bite. They are so extraordinarily wary that such cases must be very rare. I have also heard it affirmed that they possess cures for the bites of cobras and puff-adders, but I never met any who actually possessed such antidotes or claimed any immunity from snake bite. One old man for a small consideration caught me two puff-adders, and handled them quite fearlessly. He seemed very much amused when I declined to handle them also, although I am not particularly afraid of such reptiles.

The Masarwas have a slight form of totemism.<sup>1</sup> They are too much the children of the wild to have much of that. Totemism assumes some form or power of tribal combination, and this the various Bushman tribes do not possess. Tribal organization does not exist, but there is a little clan organization. A few of these clans or families may combine in the face of danger, but the combination soon comes to an end as soon as the danger is past. They never seem to feel the need of unity. Each family goes its own way, and the father is a despot as long as he can maintain his position. It is said that parents have little affection for their children, but I think that this is wrong, more especially as regards the women. I imagine there is a good deal of confidence and affection between the girls and their mothers, as they are so much together during the absence of the men.

The Masarwas, like other Bushmen, are passionately fond of dancing. They light fires, generally when the moon is full, and dance all night. They have songs with music to accompany their dances. It must be admitted, however, that both are very monotonous, especially when sung over and over again for hours at a time. I once saw the Elephant Bull dance of the Sansokwe Masarwas, to which the accompanying words were sung. The singing was done by the women, the men joining in a sort of chorus with the last words. The song did not appear to me to have any special reference to the dance, which was not necessarily religious. I give the words and a translation of the same. What the two last mean I cannot ascertain. I often asked, but the invariable reply was, "Oh, it is our song." With this I had to be content.

Tho - ra      ba      hu - ue      i - e      i - e      (etc.)  
God      leave      (us)      alone      ie      ie

<sup>1</sup> The Bushmen of the Sansokwe River call themselves *koha jee*, or zebra clan. This implies some tribal organization, however slender.

A friend of mine once saw a number of Masarwa women coming to a spring to fetch water. They walked in single file, and the leader sang the following words, so far as my friend could remember, and the others joined in the chorus: *Koro zera ya ie ie*, which means "Bird of the mountain, come-ie-ie." Unfortunately he could not remember what the tune was, but he said it was the same thing over and over again.

I have heard a Masarwa mother comfort her child with the following words sung over in a low, plaintive tone: *Gona kho se ba bie ie ie*, which means: "Keep quiet now: don't cry," etc.

The dances do not strike one as at all graceful. They consist of little more than stamping and jumping in a circle, narrowing and enlarging, while the performers go through various stoopings and twistings of the body, intended to represent the various attitudes of the animal from which the dance is named. For instance, in the Eland Bull dance the leader represents the animal grazing, running, fighting, or licking itself. It requires some knowledge of the dance to be able to understand what animal is referred to, although some of the representations are not at all bad. I have heard it said that some of these dances are very indecent, but I cannot say that they struck me as being particularly so. There is no doubt an element of coarseness present in all of them, to a lesser or greater degree, but I do not think it is greater than what obtains in many Kafir dances. I have also been told by the Bechuanas that much drunkenness and immorality take place at these dances. I invariably discounted very considerably such information, because I knew that the Bechuanas had nothing good to say of the Bushmen. The Bechuana dances of olden times were no better, and anyone who has seen some of these old dances, now rarely performed, knows that the same charge might be brought against the Bechuanas themselves.

The following song and dialogue accompanied one of these dances. The performers were Nshimane and his wife Shaiyi :—

Air. Chorus.

The musical score consists of two staves. The first staff, labeled 'Air.', contains five measures of music for a single voice. The lyrics are 'Hie', 'dhe', 'hie', 'dhe', 'hie'. The second staff, labeled 'Chorus.', contains two measures of music for a single voice. The lyrics are 'Am! am!'

**MAN :** *Thora dhe chi kwa che che.* *Em ||gaicho hu nuka ebe kwa nyut.*  
Spirit ! hear me. His wife she stays this way and that way.

*Chi kiu che che.*

Dear Mr.

**CHORUS : Am ! am !**

WOMAN : *Cha gurinya,<sup>1</sup> kwa nam ho cha kwa gurinya, Echo. Skaba kwiya*  
 You are scolding, to whom are you speaking, talking. You have got  
*kwa mkupuro ha he ka,*  
 no sense in your head.

CHORUS : *Am! am!*

MAN : *Mukurama ka paa! Cha kuma chi dhe mkupuro chana n||gaa mazia ka*  
 Goodness me ! You dare to say I have no sense in my  
*petu.<sup>2</sup> Uam chi dhe cha ||kaa skuchumo*  
 head. You will see something at the (circumcision) place. I shall hit you with  
*kagho. Thora dhe kwa che che.*  
 an axe handle. Spirit hear me.

CHORUS : *Am! am!*

I give a specimen of a Bushman hunting song, in the dialect of Natal, which was hummed to me by a native teacher who had spent some time as a boy amongst a tribe who had had much intercourse with the Bushmen. It has been arranged by a friend, Miss Elsie Naake, but is otherwise untouched. It represents a very distinct advance upon the preceding tune, and in some respects is remarkable. The words to which it is sung were quite unintelligible to my informant, and I can make little or nothing of them. Probably they mean little.

BUSHMAN HUNTING SONG.

(a) *|gim |koliya |gim |koliya*  
*|gim |koliya |gim |ko |gim*  
*|gim |gim |koliya |gim*, etc.

(b) *|ke i |ki, |ke i |ki, |ke i |ki*  
*|ke |ki |ko, |ke i |ki |ke |ki*  
*|ke i |ke |ke |ki |ko |ke |ki*, etc.

(c) *be a ba be i bi ba a ba*  
*be bi bo ba a ba be bi be bi*, etc.

<sup>1</sup> You are destroying me, literal translation.

<sup>2</sup> A dreadful imprecation, as no woman is allowed to go near the circumcision school. The women are so afraid that they will not even speak of it.

Murder, theft, adultery, and incest are crimes against the Masarwa moral code, and are punished either by fines, expulsion from the tribe, or, in the case of the last two, by death, usually by retaliation on the part of the injured party. Robbery and theft are no more common amongst them than amongst their Bechuana and Matebele neighbours, though these are supposed to be essentially Bushmen crimes, and in many cases have been the result of systematic persecution on the part of both white and black. On the whole, the customs of the Masarwas are not essentially different from those of other Bushmen, such as the Bushmen of Basutoland described by the writer some years ago.<sup>1</sup>

With reference to the number of the particular tribe dealt with in these notes, I should think that about 1000 individuals would be a liberal estimate. The number that I have come personally into contact with was very much smaller than this, not above 300, but allowing for the vast extent of country over which they are spread, the above estimate may not be excessive.

Altogether the Masarwas are low in the scale of intelligence, and the conditions under which they live do not tend to raise them. They are wayward, superstitious, and obstinate, relying upon their divining bones in every important matter and quite impatient of control. They will take offence at the least trifles, and desert one at the most critical moment for the slightest reason or no reason at all. They require very delicate and sympathetic handling, but are responsive to good treatment. I am convinced that many of the difficulties with savage or semi-savage peoples lies in unsympathetic or clumsy treatment. It is so easy to offend people through ignorance of their customs. It is so easy to alienate them without intending to do so. One may ask what is the good of spending so much time and trouble in seeking to elucidate the customs and beliefs of an obscure tribe such as the Masarwas. The answer to this question is twofold: first because the people themselves are extraordinarily interesting, as a survival of a very ancient and vanishing race. The genus Bushman will soon cease to exist, and one of the keys to the culture of the Stone Age will have gone. Second, the more we know of these people as to their manners and customs and habits of thought the more we shall be able to understand customs in other peoples that are obscure, and the better and more sympathetically we shall be able to govern them. There is need on the part of our officials for a thorough knowledge of the peoples they are set over, and the task of government is made lighter thereby.

I have found the Masarwas to be excellent friends, and very susceptible to acts of kindness. If one takes any trouble to understand their ways, or to cultivate their friendship, one can see a little farther into the mind of primitive man and the way in which our own savage ancestors thought and felt in their day.

## II.—THE LANGUAGE.

The language of the Masarwas is related, on the one hand, to the other Bushman tongues round about, and on the other hand more remotely to the Namaqua

<sup>1</sup> Report of the British Association for 1906.

and Koranna languages. It seems to stand about midway between the ||Aikwe and Tsaukwe dialects, as given by Passarge.<sup>1</sup> The degree of resemblances to Namaqua is not close, not closer than between English and German, though the dialects bordering Namaqualand are nearer to that language than those in the east, as might be expected. Several of the grammatical forms have a fairly close resemblance, as well as many of the individual words—at least the root forms of the words; but while both families of languages have descended from the same ancestral language, they have diverged so far as to have become quite distinct. Dr. Bleek came to a similar conclusion regarding the Bushman languages of the Cape more than forty years ago. With reference to the degree of resemblance between Sesarwa and the two dialects in Miss Lloyd's volume of *Bushman Folklore*, much the same may be said. They are independent languages, and while one may find many individual words and grammatical forms closely resembling each other, that is about as far as one can go. The various Bushman languages are all constructed on the same general principle, which is quite different from Bantu, yet they have all resemblances, greater or less, amongst themselves, depending on their geographical position. One can always find words in widely separated Bushman languages, expressive of common things or the names of animals, that are the same, but the great body of the vocabulary is different, and the same remark applies to Namaqua.

The following list of words will show the relation between Sesarwa and Namaqua. I have taken them from Tindall's Namaqua vocabulary for convenience:—

English.	Sesarwa.	Namaqua.
gemsbok ...	kho	khaip.
giraffe ...	gabee	neib.
gnu ...	kee	gaup.
hair ...	hoo	up.
hyæna ...	isa	hirub.
neck ...	tkano	iaup.
kudu ...	dhañ	kaib.
cow ...	jube   gaie	gumas.
lion ...	kham	khami.
man ...	choue	kaib.
knife ...	kayho	koas.
moon ...	gwee	khap.
night ...	haie	nuris.
take, to ...	tse	u 'ua.
ear ...	chee	kais.
ox... ...	jui	gumap.
arrow ...	tao	tap.
horse ...	koha	hap.
sand ...	hom	kobap.
silver jackal ...	gire	girip.
sun ...	gham	soris.
track ...	dhan	daa.

<sup>1</sup> Passarge, *Die Buschmänner der Kalahari*.

English.	Sesarwa.	Namaqua.
star	khaine	kamiro.
ostrich	garo	amis.
water	tsaa	gami.
white man	‡khuñ	urib.
tooth	kho	kup.
tree	hií	heis.
bull	poo	gob.
skins	kau	‡nams.
elephant	chowa	‡chuap.
fur	hoo	up.
woman	gaiéchwe	taras.

The relations of Sesarwa with ||Aikwe and Tsaukwe will be apparent from the same list of words in the three languages. I have taken them from Passarge's work.<sup>1</sup>

English.	Sesarwa.	Aikwe.	Tsaukwe.
gemsbok	khoo	tcho	tchoo.
giraffe	gabe	gnabi	gnabe.
gnu	kee	gi	ge.
hair	hoo	lung	lung.
hyena	isa	gau	gou.
neck	‡kano	kan	kan.
kudu	dham	kohai	kehi.
cow	jube n̄gale	gai  goe	kai  goe.
lion	kham	kham	khamma.
man	chowa	kehau kwe	kehaukwe.
knife	kugho	kan	kau.
moon	gvee	gnoe	gnoe.
night	hiie	inu noe	inu.
take, to	tsee	kui	gui.
ear	chee	ku	ke.
ox...	jus	goe	goe.
arrow	tao	'a	'a.
horse	koha	bia	bia.
sand	hom	gum	chem.
silver jackal	gire	kili	kili.
sun	gham	gam	gam.
track	dhaú	dau	dau.
star	‡khaine	gaunu	goinu.
ostrich	garo	garo	garu.
water	tsaa	tea	tsa.
white man	‡khuñ	lung	lung.
tooth	kho	goro	koi-ung.
tree	hií	yi	i.
bull	poo	ko	ko.
skins	kau	goa	goa.
elephant	chowa	chow	choa.
fur	hoo	ko	ko.
woman	gaiéchwe	gakice	gakwe.

<sup>1</sup> *Die Buschmänner der Kalahari*, p. 134, etc.

The accompanying list of words and sentences from the Seroa of Basutoland, as given by Arbousset,<sup>1</sup> with the Sesarwa equivalents, will show that there is no very close resemblance between the languages. It is impossible to be certain from Arbousset what the various clicks were:—

English.	Seroa.	Sesarwa.
ostrich	<i>tuebe</i>	<i>garo.</i>
arm	<i>kau</i>	<i>tsau.</i>
stick	<i>kibi</i>	<i>kipi.</i>
child	<i>akunte</i>	<i>gwa.</i>
wife	<i>nga</i>	<i>gaicho.</i>
hippopotamus	<i>togu</i>	<i>kabu.</i>
hyaena	<i>ohu</i>	<i>isa.</i>
honey	<i>keo</i>	<i>dence.</i>
mountain	<i>komao</i>	<i>yoo.</i>
blood	<i>tlauke</i>	<i>thaka.</i>
locusts	<i>knu</i>	<i>jim.</i>
sun	<i>ngueme</i>	<i>igham.</i>
tortoise	<i>ketenia</i>	<i>dham.</i>
wind	<i>koba</i>	<i>nyaa.</i>
food	<i>kuho</i>	<i>nyoo.</i>
moon	<i>kokoro</i>	<i>kowee.</i>
snake	<i>nyeri</i>	<i>gao.</i>
skin	<i>togu</i>	<i>kau.</i>
song	<i>koo</i>	<i>Ngai.</i>
who are you ?	<i>ate koa ?</i>	<i>kao sare ?</i>
be seated	<i>soania</i>	<i>khonica nyoo.</i>
cause the fire to burn	<i>sua kii kee</i>	<i>tee cha.</i>
I want to go to sleep	<i>itanga ikege kuenta</i>	<i>chi kwa   gam (ka) : kwe.</i>
I want to speak to you	<i>itanga ikekega</i>	<i>chi kwa   gam cha(ka) kwiza.</i>
the locusts are coming	<i>knu a see</i>	<i>jim e ya.</i>
the locusts are good	<i>knu a tae</i>	<i>jim e khaa.</i>
we wish to sing	<i>se tang se koa le</i>	<i>tsé   gum ka   gai.</i>
one	<i>te a ngoa</i>	<i> kiwiye.</i>
two	<i>te ngu</i>	<i>kamnye.</i>
three	<i>te nguene</i>	<i>ngonawé.</i>
four	<i>te nkeo</i>	<i>jubesani.</i>

<sup>1</sup> *Narrative of an Exploratory Tour*, p. 511.

It will thus be seen from these lists that Sesarwa and Namaqua are different languages, though originally related, while Sesarwa, ||Aikwe, and Tsaukwé are at most different dialects of the same language. If I had altered the German orthography of Passarge, the resemblance between many of the individual words in the above lists would have been much closer. It would, of course, be quite easy for a Nama to learn Sesarwa, or contrariwise. The following extracts from Mr. F. C. Selous<sup>1</sup> will make this clear, than whom few men have had better opportunities of judging:—

"In 1873, when hunting in the Linquasi district, to the west of Matabililand, we saw a great many Masarwas (Bushmen), and noticing that their language, full of clicks and clucks, and curious intonations of the voice, was similar in character to that I had heard spoken by the Koranas on the banks of the Orange River in 1871, I asked John if he could understand them, but he only laughed and said, 'No, Sir.' During the next two years John had a lot to do with the Masarwas, and one day, towards the end of 1874, as we were returning from the Zambezi to Matabililand, I heard him conversing quite familiarly with some of these people. 'Hullo, John,' I said, 'I thought you told me you couldn't understand the Bushmen?' 'Well, Sir,' he answered, 'at first I thought I couldn't, but gradually I found that I could understand them, and that they understood me; in fact, I can say that with a few slight differences, these Bushmen speak the same language as my people (the Koranas) on the Orange River.'<sup>2</sup>"

Again he says—

"A Griqua family, too, the Neros, who have for many years been living in Matabililand, all speak Sesarwa (the language of the Masarwas) with perfect fluency, and they have all assured me that they had no difficulty in learning it, as it was only a dialect of the Korana. . . . Altogether I am inclined to think that the Masarwas were originally a people allied in race to the Koranas and Hottentots, but that from constant infusion of foreign blood, brought amongst them by refugees from different Kafir tribes, they have to a great extent lost the characteristics of that race, though they still retain their ancient language almost intact."

We have seen that Mr. Selous, in a later publication, abandoned that opinion, and now considers them to be essentially one people, with little admixture of foreign blood.

Over against this we may set the testimony of Mr. C. C. Clements Vialls, who has spent over twenty years amongst the Masarwas. The latter thus writes in an article in *The African Monthly* for December, 1908:—

"They appear to be possessed of a very small degree of intellect, but an abnormal degree of instinct. Their vocabulary, I do not think, consists of more than three hundred words, and is a series of clicks, like the Hottentot, but quite unintelligible to that tribe. Either because they are more reticent than other

<sup>1</sup> Killed in action, German East Africa, December, 1916.

<sup>2</sup> *Travel and Adventure in South-East Africa*, p. 106.

natives, or else have no capacity of retention, I have so far been unable to extract from them, or through the Bakalahari (who have been in contact with them from a remote past) any national traditions. One peculiarity I have noticed is that among them there are some with a much darker skin, almost black, of whom the men all have beards, or tufts of hair on the face, and a good crop on the head, whereas the light-skinned or yellow ones have no beards or hair on the face, and a very sparse quantity on the head."

The truth, as we have already seen, lies between these two views. Neither is correct, but taken together they sum up the morphological and linguistic facts tolerably well. The vocabulary is, however, far larger than Mr. Vialls imagines. I have been able to collect about 2000 words, and if I had included all the Sechuana loan words the list would have been larger. I am quite sure that I have not nearly exhausted the vocabulary. I have been constantly adding to my list for the last eight years. With reference to the relationship of Korana to Sesarwa, what applies to Namaqua applies here. There would be no difficulty in picking up Sesarwa by a Korana, provided he lived any length of time amongst the people. I regret that sufficient materials are not in my possession for extended comparison, but the following short list may be useful:—

English.	Korana.	Sesarwa.
moon	kham	gwee.
place	kheib	knie.
steal, to	kha	tsu.
son	koop	gura.
he...	leimb	ebe.
rich	khu	kaiya.
there	na	haa.
poor	kasi	kaa.
strike, to	nan	kam.
pray, to	kurre	hweere.
thunder	kurrub	ghari.
bear, to	nan	chom.

There are at least three tones in the Sesarwa language, the high, middle and low. It is by these tones that words spelled the same way, meaning quite different things, are distinguished; for instance, *hweere*, to be surprised, is pronounced with the high tone, *hweee*, fear, with the middle, and *hweee*, to squeeze out pus, with the low. Similarly *gaa*, *gaa* and *gaa*, meaning to lean on, effort, and a block of wood.

### THE ALPHABET.

The alphabet employed in this vocabulary is as follows :—

- (a) Vowels, *a, e, i, o, u*; each of these has two sounds, the broad or open, and the short or close.

Diphthongs do not exist. When two vowels come together they are sounded separately, as: *|gao* and *|gau*, a snake; *khweai*, to decoy; *nomi*, to-day, and so on.

- (b) Consonants, *b, d, g, h, j, k, l, m, n, p, r, t, w, y, z, ch, dh, gh, kh, m̄, n̄, ny, sh, th*; of these the following only call for notice, the others being pronounced as in English, with the exception of *g*, which is always hard, and *r*, strongly trilled :—

*ch*, hard, as *ch* in church.

*dh*, a dental sound approaching the provincial pronunciation of *dd* in ladder.

*gh*, a guttural sound as *ch* in loch.

*kh*, a harder form of the same sound.

*m̄*, a nasal *m* with *h* before it often.

*n̄*, a nasal with two sounds, as *ng* in finger, and *ng* in singer; the latter at the end of a word, the former at the beginning, or before a click.

*ny*, something like the Spanish *ñ* in cañon.

*th*, a strong dental sound, similar to the Irish pronunciation of *t* in water = wather.

*f* is not found except in loan words, and *v* does not occur at all.

- (c) Clicks.—There are four of these, represented thus—

The dental by |

The palatal by !

The lateral by ||

The cerebral by ‡

There are various modifications of these clicks, such as hardening or softening, or nasalization, but I have not thought it necessary to introduce separate signs for them. With respect to the pronunciation these clicks, they are pronounced in the same way as the clicks Namaqua and other Bushman dialects. The dental click is pronounced by pressing the tongue against the teeth, with the mouth slightly open, and suddenly withdrawing it. The palatal click by pressing the tongue against the palate, and suddenly withdrawing it. The lateral click by pressing the tongue against the side teeth, and suddenly withdrawing it. The cerebral click is pronounced by pressing the tongue against the gum at the roots of the upper front teeth, and suddenly and forcibly

withdrawing. There is another click very seldom heard, formed by closing the faecal region and suddenly opening it, producing an explosive or choking sound. I have not deemed it necessary to introduce a separate sign for it. The so-called labial click does not occur, so far as I am aware. Clicks are interchangeable to some extent, as the dental with the lateral and cerebral, as *gao* and *||gao*, a snake; *gham* and *||kam*, the sun; *khaine* and *||khaine*, a star.

### The Noun.

The great majority of words in Sesarwa end in a vowel, or in a nasal *m* or *n*, and never in any other consonant. The accent falls on the last syllable of a word and the stress rises towards the end thus—*Chinā amā yā kakhā, chā ke kūtī chā yowāhā* = I shall bring you the pot, if you order me. This sounds rather strange to a European ear, but it is not unpleasant.

(a) There are no prefixes in Sesarwa. Most of the relations of time, place, and number are expressed by suffixes or infixes. The personal pronouns are prefixed to the verb as in English, but they are no part of it.

(b) There are two numbers in Sesarwa, with possibly the remnant of a dual, the singular and plural. The plural is formed by the suffix *re*,<sup>1</sup> as *koha*, a zebra, *kohare*, zebras; *kham*, a lion, *khamre*, lions; *tharu*, a rat, *tharure*, rats. Where, however, the noun ends in *i* the form employed is *are*, as, *shotsi*, a dream, *shotsiare*, dreams; *gaieti*, a servant, *gaietiare*, servants. In loan words the form assumed is *ra*, as, *koko*, a fowl, *kokora*, fowls; *separe*, a horse, *sperera*, horses. It would appear that *re* is the original form, and that *ra* is a later development, as it only occurs in loan words, just as we ourselves never employ an old-English plural like *en* for loan words, but always employ *s*. In the form *are*, *a* is simply a connecting vowel and no part of the original suffix. The plural in Sesarwa is never formed by other suffixes or by reduplication, as in some Bushman tongues, but only in the way indicated above.

(c) Grammatical gender does not exist in the language. There are no suffixes to indicate it, and the gender can only be inferred from the sense. The sex of an animal is indicated by a different word, or one used as an adjective, as, *aba*, a dog, *balesu*, a bitch; *jube*, an ox, *jube n̄gaie*, a cow; *cho* or *kan cho*, a man, *||gaicho*, a woman, and so on.

(d) Case, as we understand it, does not obtain in Sesarwa. Whether a noun is nominative, possessive, or objective can only be inferred from the construction of the sentence. Words undergo no change either as possessive or objective, whether preceded or followed by transitive verbs or prepositions, thus, *chi kua cha moo*, I see you; *cha kua chi moo*, you see me; *chicare e kua pii ||khaa*, the people drink milk; *||gaiha ||gaicho tsa maha*, the chief's wife has found water; *ka chi kua tsao*

<sup>1</sup> Many of the northern Masarwas use *ra*.

*abare maehe*, I saw many dogs; *tse pudira juu ni choaha*, we bought goats and sheep; *eehowe chicare chi Ɂama thukau yaehe*, five men came to me yesterday.

What has been already said will indicate that any such thing as an article is unknown to Sesarwa. Thus *aba* may mean a dog or the dog, *juu* a sheep or the sheep, and so on.

Abstract words are rare in the language. Where such have to be employed they are formed from the infinitive mood by the addition of *o*, as *|khaba*, to form a habit; *|khabao*, a habit. But it is doubtful if such forms are really abstract nouns, as, *moo*, to see, hence sight and many other words of the same sort. These undergo no change whatever. The agent is indicated by the suffix *thi*, as *|gan*, to build, *|ganthi*, a builder; *shotsi*, to dream, *shotsithi*, a dreamer; *Ɂan*, to judge, *Ɂanathi*, a judge.

#### The Adjective.

Adjectives properly so called are few in the language. The same word may be used as a noun or an adjective, as *|kio*, new or newness; *zio*, foolish or foolishness; *goju*, happy or to be happy, and so on. The adjective undergoes no change when compounded with the noun, either in the singular or the plural number, as, *|khoo hii*, a large tree, *|khoo hire*, large trees; but if we wish to use the adjective predicatively we must say, *hii e kwa |khoo*, the tree is large. A white ox is *|tie jube*, the ox is white is *jube e kwa |tie*. The large oxen is *|khoo jubera*; the oxen are large, *jubera ere kwa |khoo*; *junye abare*, black dogs; the dogs are black, *abare ere kwa junye*.

(a) The comparison of adjectives is exceedingly clumsy and bears little resemblance to what we understand by that term. The method of comparison is similar to that in Bantu. If we want to say this stone is hard, we say, *e |gwa e karii*, or *e |gwa e kwa karii*, the second part of the pronoun being usually dropped, especially when things and not persons are referred to. But if we want to say this stone is harder, we can only do so by a sort of circumlocution, *e |gwa e karii |gwa ii khaisa*, this stone is harder than that stone. Again, if we wish to employ the superlative and say this stone is hardest, we have to say, *e |gwa e ho se karii*, this stone is above all hard. The sun is very hot to-day, *e |gham se gaihe mouu*.

(b) Numeral adjectives only exist up to five, namely—

1, <i>kwiis</i> or <i>kwiye</i> .	4, <i>jubesani</i> .
2, <i> kame</i> or <i> kamnye</i> .	5 { <i>e choice</i> .
3, <i>ugimawu</i> .	<i>tsau</i> , hand = five fingers.

The higher numbers when required are supplied by combinations of these, but I doubt very much if the Masarwas can count beyond five. In the case of those acquainted with the Sechuana language, I have heard seven made up in the following way:—*tsau |kamnye*, but the speakers being able to count in another language, were thus able to form new combinations in their own. I have five oxen, *chi jubera e choice o na*; I killed two springbucks, *ka chi kwa |goo Ɂhaire |kamnye*;

we shot two elephants near the river this morning, *tse |kumnye choware |goahe kwe |gunica hu uka pakela*; we have killed four big zebras on the mountain, *tse na jubesani |khoo kohare |goahe goa nyimwa*.

Upon one occasion I asked a Mosarwa tracker how many sable antelope were in a herd that I had already counted. The reply was, "They are many, I do not know," while, as a matter of fact, there were only eleven. This bears out what I have heard from others, that the Masarwas do not count beyond five, and seldom beyond three.

(c) Ordinal adjectives are expressed in the following manner:—

First, <i>nya</i> .	Fourth, <i>samde</i> .
Second, <i> kam</i> .	Fifth, <i>tsau</i> .
Third, <i>ngonau</i> .	

Thus, *nya cho*, the first man; *samde jube*, the fourth sheep; *kuti |kam*, the second daughter, and so on.

Distributive adjectives are formed in the same way. Adverbs such as once only are expressed thus, *kwiye*, once only; *|kamnye*, twice only; *ngonauye*, thrice only.

### The Pronouns.

The following pronouns exist in the Seserwa language:—

(a) Personal pronouns—

Singular—1. <i>Chi (cha)</i> , I.	Plural—1. <i>Tse (ka)</i> , we.
2. <i>Cha</i> , you.	2. <i>Kau</i> , you.
3. <i>Ebe</i> , he, she.	3. <i>Ere</i> , they.

In the case of the 1st person there is an emphatic form in the singular, *cha*, and in the plural there is an exclusive form, *ka*, which refers to men only, whereas the ordinary form, *tse*, refers to both men and women.

In the 2nd and 3rd persons there are emphatic forms in the plural, *kare* and *ana*, but they are very seldom used, and are not exclusive.

(b) Possessive pronouns are as follows: *chi*, my, mine; *cha*, thy, thine; *em*, his, hers; *tse*, ours; *ku*, yours; and *thau eko*, theirs. Often when these pronouns are used in the sense of personal possession the suffix *dhe* is added.

If, however, there is no doubt in the speaker's mind as to whose possessions are meant, it is omitted, as, I don't see my oxen, *chi kona chidhe jubera moobe*. We could, of course, say *chi kona chi jubera moobe*, but this might convey the impression that the oxen were not certainly mine. The following forms indicative of relationship may be noticed: *chi ma*, my mother; *chi kwekwe*, my sister; *eko kwekwe*, their sister; *eko bare*, their father; but, *e ma*, his own mother; *e kwekwe*, his own sister, and so on. (A table of relationships is given further on.)

(c) The relative pronouns are—

Singular— <i>Nare</i> , who.	Plural— <i>Namachware</i> .
<i>Nao</i> , which.	<i>Namachware</i> .
<i>Nate</i> , what.	<i>Namaha</i> .

(d) *Kau nare!* who are you? (pl.); *boori namaha!* what is the news? *éng kau!* whose bag is this? *nare cha kwa moo?* whom do you see? *nare thukaa yache!* who came yesterday? From these examples it will be seen that the interrogative pronouns are the same as the relative, with the exception of *nama*, which. The plurals are the same as the relative forms.

(e) Indefinite pronouns are thus expressed: *tha (cho)*, some person; *tha (ha)*, some thing; plural, *tsaa*, for persons, *tsase*, for things in the sense of many; *bese*, few; *eye*, other, any other; *tsau*, much. Thus, the people are not many, *e cho bese*; the oxen are not many, *jubera e kwa bese*; *chware eye*, any people, and so on. *Haini* and *kica* are used in the sense of small numbers. These words are really diminutives and are seldom used.

(f) Demonstrative pronouns are expressed by *e*, this; *a*, that; and *ho*, that yonder, singular and plural.

(g) Distributive pronouns can only be expressed in a roundabout way, thus, *eye eyei* = one and one, therefore each for both persons and things. Every is expressed in the same way, as, every zebra is wild, *koha eye eyei tsa haie e*. Either, or, is expressed by *kana*, and neither, nor, by *kana* followed by a negative, as neither men nor women must go, *chware kana |gaichicare ere kona khoobe*.

The personal pronouns, when compounded with verbs, take on, for want of a better name, what is known as the verbal form, as, *shi kwa ||gam*, I love; *ka chi kwa ||gam*, I loved; *kica* in these examples being the verbal form. Very often the personal pronoun is omitted, and only the verbal form expressed, as, the man loved, *cho ka kwa ||gam*. The full form would be *cho ka ebe kwa ||gam*. Often *ebe* is contracted into *e*, so that we could say, *cho e kwa ka ||gam* well enough. When speaking of things the pronouns are not used in this sense. There is only one form for both singular and plural, thus, the oxen are grazing on the mountain, *jubera e kwa nyooe 'goa nyimo*. The zebra is calling its foal, *koha e kica chii em sepe* *kwa*.

This characteristic is shared by Sesarwa in common with other Bushman languages, and is found in all those that have been investigated, and shows that gender does not exist in a grammatical sense, and the need for separate pronouns to express it has not arisen.

### The Verb.

Verbal forms are well developed in the Sesarwa language, as might be expected. This is a character of nearly all savage tongues, or at least of all primitive peoples' languages. It is the same in other Bushman dialects. As the life of the people was one of continual struggle against nature, words indicative of action in its various forms, such as moods and tenses, are numerous and complicated. There are two voices, active and passive; five moods, indicative, subjunctive, conditional, imperative, and infinitive; and a large number of tenses, indicating present, past, perfect, and future time, with compounds of these, both positive and negative. Fine shades of meaning are expressed by means of particles, which are

either prefixed or suffixed to the verbal root. In fact, a Sesarwa verb is remarkably complete in the matter of tenses, and in this respect resembles the Bantu languages.

The following is a fairly complete paradigm of the verb, though several of the tenses are very seldom used:—

ACTIVE VOICE.

*Indicative Mood.*

Present Tense.

- |   |  |
|---|--|
| Singular—1. <i>Chi kica   gam</i> , I love. | Plural—1. <i>Tse kica   gam</i> , we love. |
| 2. <i>Cha kica   gam</i> , you love.        | 2. <i>Kau kwa   gam</i> , you love.        |
| 3. <i>Ebe kwa   gam</i> , he loves.         | 3. <i>Ere kwa   gam</i> , they love.       |

Past.

- |  |   |
|--|---|
| Singular—1. <i>Ka chi kica   gam</i> , I loved, etc. | Plural—1. <i>Ka tse kica   gam</i> , we loved, etc. |
| 2. <i>Ka cha kwa   gam</i> , you loved, etc.         | 2. <i>Ka kau kwa   gam</i> , you loved, etc.        |
| 3. <i>Ka ebe kwa   gam</i> , he loved, etc.          | 3. <i>Ka ere kwa   gam</i> , they loved, etc.       |

Past (Emphatic form)—*Chi kwa ||gamaha*, I did love, etc.

Future—*Chi na ||gam*, I shall love, etc.

Perfect—*Chi ||gamaha*, I have loved, etc.

Pluperfect—*Chi ka ||gamaha*, I had loved, etc.

Future perfect—*Chi na ||gamaha*, I shall have loved, etc.

Negative forms of the above tenses are formed in the following manner: in the present, past, and future by the insertion of a particle, *kona*, between the pronoun and the verb, and by the addition of a negative particle, *bee*, thus—

*Chi kona ||gambbee*, I do not love, etc.

*Ka chi kona ||gambbee*, I did not love, etc.

*Chi na ||gambbee*, I shall not love, etc.

The negative perfect, pluperfect, and future perfect are formed by the suffix *tha*, thus—

*Chi ||gumtha*, I have not loved, etc.

*Chi ka ||gumtha*, I had not loved, etc.

*Chi na ||gumtha*, I shall not have loved, etc.

*Subjunctive Mood.*

Present—*Chi ke ||gam*, I may love, etc.

Past—*Ka chi ke ||gam*, I might, could love, etc.

Perfect—*Chi ka ||gamaha*, I may have loved, etc.

Pluperfect—*Ka chi ke ||gamaha*, I might have loved, etc.

Negative forms exist of all the above tenses, thus—

*Chi ke ||gumbee*, I may not love, etc.

*Ka chi ke ||gumbee*, I might not love, etc.

*Ka chi na ||gumtha*, I might not have loved, etc.

There are certain other forms of the affirmative and negative used for the above tenses when used in dependent sentences, or employed when speaking of things remote in point of time. It will not, however, be necessary to give the full forms in each case, as they are used very sparingly.

#### Present.

Singular—1. *Chiñ ||gam*, that I may

love, etc.

2. *Chaañ ||gam*, that you  
may love, etc.

3. *Eññ ||gam*, that he may  
love, etc.

Plural—1. *Tseñ ||gam*, that we may love,

etc.

2. *Kauñ ||gam*, that you may love.

3. *Eñ ||gam*, that they may love.

#### Present Negative.

1. *Chiñ ||gamthi*, that I may not love, etc.

3. *Eññ ||gamthi*, that he may not love, etc.

#### Future Affirmative.

1. *Chiñ hena ||gam*, that I shall be loving, etc.

2. *Chaañ hena ||gam*, that you shall be loving, etc.

#### Future Negative.

1. *Chiñ hena ||gamthi*, that I shall not be loving, etc.

3. *Eññ hena ||gamthi*, that he shall not be loving, etc.

1, pl. *Tseñ hena ||gamthi*, that we shall not be loving, etc.

#### Conditional Mood.

Present—*China ka kwa ||gum*, I would love, etc.

Past—*Chi na ku ||gumaha*, I should have loved, etc.

Negative forms of these tenses exist thus—

Present—*China ka kwa ||gumbee*, I should not love, etc.

Past—*China ka ||gumiha*, I should not have loved, etc.

Progressive tenses are also used. For the present and past the forms are the same as the corresponding tenses in the indicative mood, that is, *chi kwa ||gum* and *ka chi kwa ||gum*. The future is different. The form employed is *chi na kwa ||gum*, I shall be loving, and so on.

Possibility is expressed thus—

*Chi ke kwa ||gamka*, if I love, etc.

*Ka chi ke kwa ||gamaha*, if I loved, etc.

*Chi ke ka ||gamaha*, if I have loved, etc.

*Ka chi ke ka ||gamaha*, if I had loved, etc.

#### *Imperative Mood.*

Present.

Singular—2. *||Gam*, love.

Plural—2. *Kau ||gam*, love (ye).

#### *Infinitive Mood.*

Present—*||Gam* or *se ||gam*, to love.

Perfect—*||Gamaha* or *se ||gamaha*, to have loved.

#### *Participles.*

Present—*||Gam*, loving.

Perfect—*||Gamaha*, having loved.

Past—*Ka ||gam*, loved.

#### **PASSIVE VOICE.**

The passive voice is formed from the active by the addition of the following suffixes: *ee* for the present, *bee* for the past tenses, and *cha* for the perfect, pluperfect, and future perfect tenses.

Present—*Chi kwa ||gamee*, I am loved, etc.

Past—*Ka chi kwa ||gamee*, I was loved, etc.

Future—*Chi na ||gamee*, I shall be loved, etc.

Perfect—*Chi e ||gameha*, I have been loved, etc.

Pluperfect—*Chi e ka ||gameha*, I had been loved, etc.

Future perfect—*Chi na ||gameha*, I shall be loved, etc.

Negative forms of all these tenses exist and are thus formed—

Present—*Chi kona ||gambee*, I am not loved, etc.

Past—*Ka chi kona ||gambbee*, I was not loved, etc.

Future—*Chi na ||gambee*, I shall not be loved, etc.

Perfect—*Chi e ||gametha*, I have not been loved, etc.

Pluperfect—*Chi e ka ||gametha*, I had not been loved, etc.

Future perfect—*Chi e na ||gametha*, I shall not have been loved, etc.

#### *Subjunctive Mood.*

Present—*Chi ke ||gamee*, I may be loved, etc.

Past—*Ka chi ke ||gamee*, I might be loved, etc.

Perfect—*Chi na ke ||gametha*, I may have been loved, etc.

Pluperfect—*Ka chi na ke ||gametha*, I might have been loved, etc.

Negative forms of these tenses are formed thus—

Present—*Chi ke |gumbee*, I may not be loved.

Past—*Ka chi ke |gumbee*, I might not be loved.

Perfect—*Chi ke |gumetha*, I may not have been loved.

Pluperfect—*Ka chi ke |gumetha*, I might not have been loved.

#### *Conditional Mood.*

Present—*Chi na ka kwa ||gabee*, I should be loved, etc.

Past—*Chi na ka ||gabeeha*, I should have been loved, etc.

Negative forms of these tenses—

Present—*Chi na ka kwa ||gabee*, I should not be loved, etc.

Perfect—*Chi na ka ||gabeeha*, I should not have been loved, etc.

The progressive tenses are as follows :—

Present tense, affirmative—*Chi kwa ||gabee*, I am being loved.

" " negative—*Chi kwa ||gabee*, I am not being loved.

Past tense, affirmative—*Ka chi kwa ||gabee*, I was being loved.

" " negative—*Ka chi kwa ||gabee*, I was not being loved.

#### *Imperative Mood.*

##### *Present Tense.*

Singular—*||Gabee*, loved.

Plural—*Kau ||gabee*, loved.

#### *Infinitive Mood.*

Present—*||Gabee*, or *se ||gabee*, to be loved.

Perfect—*||Gametha*, or *se ||gumetha*, to have been loved.

#### *Participles.*

Present—*||Gabee*, being loved.

Perfect—*||Gametha*, having been loved.

#### *Adverbs.*

Adverbs are fairly common in the Seserwa language. The following are those most commonly used :—

Time: *eta*, when; *nau*, yesterday; *tene*, in a little while; *thoo*, always; *thukua*, yesterday; *uka*, *wika*, to-morrow; *u pakela*, early; *|kwiye*, one time.

Place: *aeka*, at home; *enwa*, here; *erewa*, *haa*, there; *hora*, over yonder; *kai yoka*, outside; *noi yeha*, everywhere.

Manner: *aru*, namely; *banchwa*, really; *che koha*, also; *chi*, so that; *chu*, perhaps; *gwigwa*, or *|kwiya*, alone; *kuase*, clearly; *kana*, perhaps; *kelex*, although; *natha*, how; *tscho me*, truly; *weka wku*, seeing that.

Affirmation and negation: *aa*, yes; *ye*, yes; *nama*, no; *che ube*, not at all, by no means; *chwa u|gwa*, not at all; *||gwa*, not a bit of it!

**Prepositions.**

Those most commonly employed are as follows:—*Cha ka*, by means of; *jurihe*, beware of; *ka*, with; *|gaiewa*, in the middle of; *Ukhaiiewa*, between; *hom*, on, upon, below; *khono*, down, below, under; *khonwa*, on the ground; *kunuwa*, under; *khuthi*, in presence of, in sight of; *nya*, before; *thoo bakwa*, on account of; *yim oka*, beyond.

**SYNTAX.**

There is very little syntax, at least in the sense of English or Bantu, in the Sesarwa language. Having had no literature, the language has not developed in this way. All statements are made directly and there is little of the oblique construction. A few verbal tenses are used after certain conjunctions, more especially in the subjunctive mood, when speaking of things remote, but that is about all. Complex and compound conditional sentences do not occur. The Masarwas do not need them.

*Sentences.*

English.	Sesarwa.
Good morning.	<i>Kum burn.</i>
Where do you come from ?	<i>Cha nam kho ?</i>
Are you quite well ?	<i>Cha hwi kuase kwia ha e ?</i>
Where do you live ?	<i>Nam cha  ganaha ?</i>
We live at Tati.	<i>Tse Tati ka  ganaha.</i>
Sit on the ground.	<i>Khonwa nyo.</i>
Did you sleep well ?	<i>Cha ka se  kowee ha e ?</i>
Fill the bowl with water.	<i> Koewa tsuu  kowi.</i>
Wash the pot.	<i>Ana  khaho.</i>
Bring the things.	<i>Bibare  khoo.</i>
Do you hear me ?	<i>Cha kwe chi chom ee ?</i>
Where is the road ?	<i>Dhuu namaha ?</i>
There are guinea-fowl in this jungle.	<i> Ganere a  hoowa.</i>
Where can a springbok be found ?	<i>Nam  khaie maowe ?</i>
There are wild duck on the vlei.	<i>Jonare horeica.</i>
My throat is swollen.	<i>Chi dom haie yaha.</i>
He has gone to his village.	<i>Ebe kham aie khoaha.</i>
The sun is very hot.	<i>E  gham se gaihe.</i>
I see you.	<i>Chi kwa cha moo.</i>
The men answer him.	<i>Chiware kwa e ha wee.</i>
The woman knows them.	<i> Gaicho kwa añ n.</i>

*Sentences—contd.*

## English.

I see the cattle.  
 The children buy meat.  
 I like you very much.  
 The woman grinds very well.  
 I drink water.  
 I am not coming here.  
 We are going to the chief's.  
 The women have bought blankets.  
 The Bechuana know how to build.  
 My father came yesterday.  
 I saw them yesterday.  
 We shall rise early to-morrow.  
 We want to see the sun.  
 The boys set fire to the forest.  
 I saw the game.  
 My dog is black.  
 Five men came to see me yesterday.  
 That man killed two hyenas on the veld.  
 We shot two elephants near the river this morning.  
 My oxen have gone away into the Matopos.  
 The woman died last month.  
 My corn is quite bad.  
 This Bushman is blind.  
 It has been raining for three days.  
 I shall come if you call me.  
 Who came yesterday?  
 What have they done?  
 I want to be a herdboy.  
 Make a fire.  
 The water is boiling.  
 The zebras drink water every day.  
 The wind is cold.  
 The woman is hungry.  
 The hyena catches many goats.  
 The Bushmen shoot with bows.  
 The Bushman drinks milk.  
 The Bushmen sleep under skins.

## Sesarwa.

*Chi kwa jubera moo.*  
*|Gwei |gwure koko chon.*  
*Chi kwa moowa cha ||gam.*  
*||Gaicho kwa karisi khoñ.*  
*Chi kwa tsua tha.*  
*Chi kwa enwa ya be.*  
*Tse kuu ||gaieha o khu.*  
*||Gaiechware chororo choaha.*  
*||Ghare ju ||gañ unaha.*  
*Bare thukaa horowana.*  
*Ka chi kwa thukaa eru moehe*  
*Tse na u pakela than.*  
*Tse kwa ||gam moo ||gham.*  
*Karoare khoo dhauha.*  
*Ka chi kwa ||kam ||gera moshe.*  
*Chi aba e junye.*  
*Echoue chware chi ||kama thukaa yache.*  
*Hau cho ||kamnye isire noo ||goahe.*  
  
*Tse ||kamnye choware ||goahe kave ||guuwa ha uka pakela.*  
*Chi jubera Mathopo ||yuo khoaha.*  
  
*||Gaicho oha ||goice ka oha.*  
*Chi choko e gurinye.*  
*A Hie cho chai o num.*  
*Tu we ngonance ||ghamre tuahn.*  
*Chi na ya cha ke kua cha chikwa.*  
*Nure thukaa yache?*  
*Nao-e are heahu?*  
*Chi kua jurethi se ka.*  
*|Tee cho.*  
*Tsaa e kua bela.*  
*Kohare ere kua uo uo tsaa ||khaa.*  
*Nyau khainye.*  
*||Gaicho ebe kua ||kabaha.*  
*Isa e kua tsao pudira ||goo.*  
*Hie chware ere kua ||gumee ka n ||khai.*  
*Hie ebe kua pii ||khaa.*  
*Hie chware ere kua khun ka chua ||koe.*

## Sentences—contd.

English.	Sesarwa.
The Bushman is under the tree.	<i>Hie cho ebe kwa hii khonwa.</i>
The Bushman is in the tree.	<i>Hie cho ebe kwa hii owa.</i>
I see the water very far off.	<i>Chi buwa tsaa moo guno.</i>
The Bechuana have horses.	<i>Ghare ere kwa kohare ha.</i>
The horse has two eyes.	<i>Koha  kamnye chaii ha e.</i>
Do not kill the oxen.	<i>Gana pulure  goo.</i>
Do not run away from the water.	<i>Gana tsaa hwee.</i>

There is not much resemblance between the languages given in Bleek and Lloyd's *Bushman Folk Lore* and Sesarwa, as the following translations of two passages will indicate. I have slightly altered the orthography in the case of Bleek :—

English.	Bushman (Bleek).	Sesarwa.
The jackal watches the leopard, when the leopard has killed a springbuck. The jackal cries in a sorrowful way, and asks the leopard for some of the springbuck's flesh. He howls, he begs, for he is a jackal. Thus he howls when he begs, he indeed wants the leopard to give him flesh that he may indeed eat.	<i>Koroken   khan  ki   kaue, au   kaueten ka wai. Koroken  ne   khei   khei, han  ne tan-i   kane au waita a. Han boro han tan-i, au han tatti e koro  ku e. He ti hin e ha  ku boro, han   kwan tan-i, han tatti koro  ku e. He ti hin e, ha  ku boro au ha tan-i, han   kwan ka   kaue a ha u, ha si ha, ha si   kham ha.</i>	<i>Gire e kwa khao  gneai ka kha ke gaie  goaha,  Gire kwa  kee thoo cho ka, ebe kwa khao e gaie koho, ka iye tona ebe kwa au  gire moowa. Ebe kwa au em ke kwa khao ka tonaka, ebe kwa khao koho eba thee ka e mena e nyoo.</i>
Then the leopard is angry, and the leopard bites him and kills him, and he hides his dead body in the bushes. Thus he hides him.	<i>He ti hin e,   kaueten  ne koein i,   kaueten  ne  ki ha,   kaueten  ne tsi   kuken ha, han  ne ho ha, han  ne  an  ki e ha au  kubbi; he ti hin e han  ne  nau ti ha.</i>	<i>Khao e ka haiaha khao eba pha eba  goo eba em  gwii  khowa gan.</i>

<sup>1</sup> From Bleek and Lloyd's *Bushman Folk Lore*, p. 244.

English.	Kun (Bleek).	Sesarwa.
If a woman steals another person's thing and returns to her husband, and her husband sees the other person's thing, his heart aches, and he kills her, he altogether kills his wife.	Zau ti tcha dzu tanki tshi; ha ti debbi ha yao ha 'kao ti ssiu dzu tanki tshi, ha 'kha ti kwi ta ha ti kun ha, ha ti kun ara ha zau.	Ka  gaicho ke kwa e n  khare biba tsu ka e sha gure kho ka she kuu cho  kham thoos kuu cho kwa ke eye biba moa ka. Em choo e kwa thoos ebe kwa sha  goo e kwa sha  goo ii si.
Another man says to him, "No, do not quite kill your wife." And he objects, saying, "No, I object to stealing, and my heart aches and I will kill my wife; leave off talking to me; to-day you must fear me."	Dzu tanki ti okhiri ha "N-n te kun ara a zau." Ta ha ti  na, "N-n n a  na tcha, ta  kha kwi ta n a kun me zau;  ne te okhwi me  kan ma e i koa me." <sup>1</sup>	Kau cho ka eye ebe kwa ha thee thama, "  Gana cha  goo cho  goo thii." Ebe koma namaa, " Chi kona tsao  gambee chi cho thoos chi na chi  gaicho  goo  gana chi kwi thii.  Gie chi kau na kica ka hwee."

From a study of the above passages it will be seen that Sesarwa is considerably further advanced in grammatical evolution than these languages given by Bleek, more especially the first. It has already shed many of the harsher nasals and gutturals, as well as reduced the clicks.

## TEXTS.

(1.)

Giri kam ere kwa f'kao |gwa bare ebe kwa ||gam(a) seo kaa,  
 The Matsbele they (say) (when) a young man wants to ask his parents to marry  
 ebe kwa uka pakela than, ebe kwa aio jubera |gole ebe kwa are namera  
 he rises very early, he opens the kraal for the cows, he gives them their calves  
 piiibe, chware ihe hwe f'kweho, ebe kwa ona athe ao oo heebe.  
 to suck, the people all still being asleep, though usually he does not do so.

(2.)

Kham |gire ii, |gham ka |kwie ka ere kwa |gween ka dure. Kham n|khaiya  
 The lion and jackal went one day to lie in wait for elands. The lion shot  
 ka koma, ii ka ebe kwa osa |gire koma ka kwa uba, ka ii kwa chii,  
 with the bow he missed his buck, the jackal shot with the bow and hit, and he called out,

<sup>1</sup> From Bleek and Lloyd's *Bushman Folk Lore*, p. 419.

"Há ! há !" Kham ebe kwa, "Nama ka cha kona ū|khaiyambe, chigwiya kwa  
 "Há ! há !" The lion said, "No, you have hit nothing, I have hit  
 ū|khaiya." |Gire kwa wee ii, "Ye bare cha ubaha." Ere kwa ii |kam ae ka  
 (myself)." The jackal replied, "Yes, father, you have hit." They both went home  
 chi ka ere ke ||khwa nam|kam du kwa ohs, ka ii ere ke kare.  
 (in order) to return when the eland was dead to cut up the body.

Atha e i teme |gire ka ere kwa ||khwa du, ka |gire kwa cheū du,  
 Nevertheless, the jackal returned to the carcass of the eland, and the jackal hid the  
 chena kham ka ebe kwa kekee banchwa.  
 eland, so that the lion was quite beaten.

## (3.)

|Garo e ka ū|kam |gem |gaieha (ng |ha) ere kham ii kho. E are  
 The ostrich was the king of the animals and they went with the lion. When  
 ke kwa kho ka e are ū|kam |gera ntoera moo. Kham e kho ka |garo ||kabaq  
 they were going together they saw many herds of animals. The lion was afraid of the ostrich  
 (tsio) hwhee e are ū|kam |gera |khoo. |Garo kwa kham hwehwe e ū|kam  
 because of its wings that chased away the animals. The ostrich left the lion behind and  
 |gera gauo, e kham e thama, "Cha |kho ama chi |kho o na be." Kham e ū|kam  
 ran in front of the game, and said to the lion, "Kill for me for I am toothless." The lion killed  
 |gera |khoo, e kho ka khoo hwhee. |Garo kham e thama, "E kwii."  
 the game (but) he was afraid to eat. The ostrich said to the lion, "Cut it (up)." |Garo (jwenjwe) nyoo (kana) e |kho o na be. Kham e koho ie nyoo a ho chwaho  
 The ostrich ate the kidneys because he had no teeth. The lion ate all the rest of the meat, and  
 e are |gara chu. Are ke kwa |karaka, |garo e gariji o hwhee. Kham  
 they separated. After they had parted the ostrich made a noise, and the lion  
 ka e e|gham e tsam e khoo e |garo e kamacha ū|kwe kana ka e ū|kam e ka  
 was afraid. Next day the lion went to the ostrich and found him asleep, and opened his  
 ||gole. E ka ū|khwii kana em ū|kam ka ebe kwa ||gole e |kwii "chi |gaieha  
 mouth. He laughed when he opened his mouth, and he said, "My chief,  
 o na be e kwa |kho tsii."  
 you have no teeth."

(4.) *The Twenty-third Psalm.*<sup>1</sup>

Thora e chi jurethi. China e ho tsiaibe. Ebe kwa tsaruwe dwa wa dhabé  
 God is my shepherd. I shall not want. He makes me to lie down  
 nyohwao, ebe kwa goo tsau cha nō. Ebe kwa chi |gom |goaho; ebe kwa  
 in (green) pastures, he leadeth me by the still waters. He restoreth my soul; he leadeth me  
 ka dhauwa oha ko kaho em ū|kun thoo bakwa. Aa chi kwa mohororo (S.)  
 in the paths of righteousness for his name's sake. Yea, though I walk

<sup>1</sup> Translated from Sechuana by a Mosarwa.

shom ralale (S.) the me china e ho ho cha |kañ hoo a nau ebe chi ha ; through the valley of the shadow of death I will fear no evil, for thou art with me ; cha cho cha thobane ni ere kwa cha goothi kakho. Cha kwa nyoo kwa ohwa thy rod and thy staff they comfort me. Thou preparest a table  
 baakanya (S.) chi kaiewa chi |kuthi chaiewa ; cha kwa chima chima chi |guika before me in the presence of mine enemies : thou anointest my head with oil, |kaha ; chi guyu e |kweha. Cho ena chi jurewa a thoo chomamo i chi kweo my cap runneth over. Surely goodness and mercy shall follow me all  
 |kam ihe ka. China ii Thora juuwa |gana ise.  
 the days of my life. And I shall dwell in the house of God for ever.

(S.) indicates that the word is Sechuana.

### (5.) *Kham |gire ii.*

Kham |gire ii e tsa oo kho e churi. E tsa ya ku dure kham ii |gamee ka ebe kham sa kobo (em du). |gire |ga ebe kham khai koho (em du). Kham ebe ka haiaha ebe au, "Chi cha kareha cha i saha." |gie |gire ka ebe kwa hwhee (are) amehu kham ii (are) a thee. "Oa cha e koho |koaha." Are a hu chwa ho aio |koeho kho, nyim |koaho koho |khoa. A hu chwa ho kham e |khoe |gire gwéreko e oha du em |gaa taraha ebe owa chaa ebe e be kham |gwi nyoo dweree choo ha e. Kham e kho ebe |gwiwa sii, ebe |gire tsau moo oha, koho a thee. Kham e tsau ka ha ghowa kai yoka, e ba gam se ebe ha yowa thañ a kai yoka thee. A hu chwa ho kham e dwi |gire nyoo kaie, eba thee eba ka yowa kai dweho thama se e |khai koh |gire dweho thama |khai koh se e na |gaicho |gware ii. Thu |gire |gwi se ebe kham nu, |gaicho |gware oo, ii ebe khai koh are thee kham |gaicho |gware, ii ebe karisi ka haie |gaicho |gware ii, ha noka e thaka noo. Boori e kamee.

### (Translation)—*The Lion and the Jackal.*

A lion and a jackal went to hunt one day. They came in sight of a lot of elands, and the lion shot with his bow and missed his buck. Then the jackal tried and hit his eland. The lion was angry and called out, "I have hit, you have missed." Now the jackal was afraid, and agreed with the lion and said, "Yes, you have hit." After that they went home to have a sleep, intending to come back, to cut up the meat. As soon as the lion was asleep, the jackal went back to the dead buck, and tearing out its belly crawled into it, and began to eat all the best part of the fat round the heart.

The lion awoke and immediately came to the carcase, and saw the jackal's tail sticking out of the dead eland. So the lion caught him by the tail, and swung him out, and ordered him to stand at a distance. Afterwards the lion gave the jackal some small pieces of meat to eat, and told him to take some of the best of the fat to the lion's wife and children, but the jackal took the fat to his own wife and children, and then he fled quite away with his own wife and children to another part of the country. The tale is ended.

(6.) *Hie chware |gwee ii.*

Tsa Hie chware |kho horewa ka ere kwa |kwee. Ebe thau ka kho e |gwee moo, kwa choa debe debe tsaa wa |hwa. Ebe ka yowa chware eye, ere ka kwa itumelana<sup>1</sup> |gwee ka ere ka kwa n̄ |ghuru |gu |gu, en |goo ii ka ere ya guneho, ihe ka ere kwa |goo kaho. Boori e kamee.

(Translation)—*The Bushmen and the Moon.*

A lot of Bushmen were once sleeping at a vlei. One of them happened to wake (out of his sleep), and saw the moon come down to wash her face in the water. He told the rest, and they were so pleased with the sight that they forgot to keep watch, and their enemies crept up behind them and slew them all. The tale is ended.

(7.) *Ngaro jobi ii.*

Thora ka ebe ya boori kai churi tsee chware wa cha ka |kam ngaro, "Chware kau, na ihe oo, kau na theme thañ |gweka." Ngaro e ka kwa dwese kho e boori ka ebe kwa n̄ |ghuru, e ka |gure ka ū |kwa Thora oo; Thora ka e kwa kaiyaha, ebe ka jobi chii ka se thama, "Cha kho karisi hwa. E boori se chware o ka e un chware kau, na ihe oo, kau theme thañ |gweka." Jobi boori ka ebe n̄ |ghuru ka ebe kwa boori gabi, "Chware kau, na ihe oo, kau na oo isi." Chware ka ere kwa |kause khaiyaha ka ebe |goa chaacha, ebe ka kwa thara ebe ka em kamwa chwa, jobi yena e taraha. Boori e kamee.

(Translation)—*The Chameleon and the Hare. (The origin of death.)*

God in olden days sent this message to men by the mouth of the chameleon, "Oh, men, you will all die, but you will rise again." Now the chameleon was slow, and forgot the message, so he turned back to God (to ask Him). God was angry and called the hare, and said, "You are a quick runner; take this message to men, 'Oh, men, you will all die, but you will rise again.'" Now the hare forgot, and changed the message into "Oh, men, you will all die, but you will die for ever." The men were so angry that one lifted a stone and struck the hare, and split her lip, so the hare has always a cleft lip. The tale is ended.

(8.) *Nama e ka tsathi?*

Kau we |gire isa ii ka e kwa ya, ka ere kwa tsa cho |kama em gaiethiare kwa. ||Gaiwa haie |gire ka e kwa ||ka kau, ka e chima chima isa tsau |gwi |kama, ka e kwa nyoo |gwi ihe juwa. Ha uka pakela cho e ka moo em |gwi, ka e kwa nyan |gire en hena nyoha |gwi. |gire ka e kwa, "Chañ ka ||khao isa tsau, chañ tsathi moo." Chowe e ka ||khao isa tsau, e ka ||gam̄ isa yena abe ka banchwa e kwa oha. Boori e kamee.

(Translation)—*Who was the Thief?*

A jackal and a hyena went and worked for a man as his servants. In the middle of the night the jackal arose and rubbed the hyena's tail with fat, and then

<sup>1</sup> A Sechuana word meaning to be of one mind, to be glad.

he ate up all the fat that was in the (man's) house. In the morning the man missed his fat, and immediately accused the jackal of having eaten it. "If you look at the hyena's tail," said the jackal, "you will behold the thief." Then the man looked at the hyena's tail, and he thrashed so much that he almost died. The tale is ended.

The following is the preceding tale in the dialect of Lake Ngami, from which it will be seen that, while there is a great difference in the individual words, the general resemblance to Sesarwa is considerable.

*Tsa che ye ka nama!* (Who was the thief?)

Kau we |gire i we kere kama naye ihi yo cho-sii. Cha khaye |gire tanaye e kaui, |gire a kama ||gau, |gire ka yo hau aa. U ka kha chaa u ya a tsiana. E tsa chana ka e |gire a ye ka na. "Kan tsaye we ng|uri||ga |ga kwa kwii dena ma tsa re na ree." Ka cho kha tha ye nya ebe kau kana i khowa oo. Boori e kamee.

POPULAR TALES AND CUSTOMS.

(1.) *The Origin of Marriage.*

In the beginning of things, a long, long time ago, when the men and women of the early race lived upon the earth, so my father told me, the men lived by hunting and the women by gathering grass seeds. They lived on opposite sides of a big river. In this river there grew a great quantity of reeds, in which the women gathered the seeds. One day the men went out shooting with their bows and poisoned arrows and killed a springbuck. They had no fire to cook the meat, as they had carelessly let their fire go out. They were not like the women, who always carried some fire, and did things nicely. The men often took a long time to get the fire alight again. This day they were so hungry that they could not wait, and so they sent one of their number down to the river to get some fire from the women. Now there were five of them. When the man got down to the river, and went across, he found a woman amongst the reeds gathering grass seeds, and he asked her for some fire. She said to him: "Come to my place, and I will give you some." When they arrived at the village they went into one of the huts, and the woman told him to wait until she had crushed the grass seeds, and then she would give him some fire. So he sat down and waited. The woman got her stone and pounded up the seeds; then she put the seeds into a pot and made some porridge. After it was cooked she gave some of it to the man, and he asked her what it was, and she said it was porridge. "Well," said he, "it is very nice food, and I shall just stay with you." So he did not go back to his companions with the fire.

After waiting a long time, the men, who were beginning to feel hungry by this time, sent another of their number down to the river to get fire. He also met a woman gathering grass seeds, and he told her he had come for some fire. She told him to wait until her return to her hut, when she would give him some fire. He

waited. She also made some porridge, and gave him a share of it, and he said the food was nice, so he quite forgot to go back with the fire.

Next a third man was sent with the same message. He also got down to the river and found a woman amongst the reeds. He told her he had come to get some fire, for their own fire had gone out, and they were very hungry. He did not say anything about the other two men, as he was so very much afraid. The woman said to him : "If you will come to my village I will give you some fire." He went with her, and she made some fire and cooked porridge. He was quite pleased with the food, and said it was very nice. So he also quite forgot to go back with the fire.

Now there were only two men left. They began to get very frightened. They did not know why their companions had not come back with the fire. There were many evil spirits in those days, and they thought their friends might be killed. They began to quarrel, and one of them said to the other : "Wait here till I go and try to get some fire from the women over yonder." So he went away : the other man waited. But he met a woman near the river, and he returned with her to her village, and did not come back to his companion. By this time many days had gone by, and the springbuck was getting quite rotten, for it was very hot weather, and the last man was getting very hungry. So he waited a long time, but his friend never came back. He took up his bow and arrows and fled into the far country, and was lost altogether. This is how marriage came amongst men and women, and it is the end of the tale.

#### (2.) *The Origin of Man and the Animals.*

In the beginning of things, man and the animals came out in this way, at least so the Bechuanas say. At Sechele's Town there is a big hole called Lööwe, which goes down a long, long way. It is so deep that if you take a stone and drop it down the hole, you can hear it falling for a great while, but you never hear it get to the bottom ; so nobody knows how far it goes down, for we never try to get to the bottom, as we are very much afraid. In this big hole the animals and the men were together at first. But the hole was far too small for them after a while, and they were constantly quarrelling for want of room, and each wanted to push the other out. At last they were so angry that the men began to drive the animals out, and the animals would not go, so the men had to drive them out backwards. As fast as they drove them out, they tried to come in again ; but at last they quite drove them out. Now the ground at the mouth of the cave was very soft, there was a river, and some reeds growing there. The animals, especially the cattle, made much spoor, and the ground was much cut up with their tracks. The animals were very much afraid, and did not go very far from the mouth of the cave. They stayed round about the hole the first night. By and by, however, they all wandered away, and began to eat the grass round about the place, and so they forgot all about the hole. After a time the men began to be so many that there was no room for them, and so they began to quarrel, and so they drove each other out ; and when they were going, they

destroyed the spoor of the animals, so that you cannot see the spoor any more. If you go to the cave at Lööwe you will see that what I tell you is true, and it is the end of the tale.

(3.) *Another Version of the above Tale.*

Near Sechele's Town there is a big cave, so big no man has ever seen the whole of it. Out of this cave the animals came first, and afterwards the men, because it was far too small for all of them. The animals came out in great numbers first. There were elands and blesbucks, and springbucks, and lots of other kinds, many of which we do not see now in the land. When they came out they made much spoor, and they stayed about the mouth of the hole a long time. The men then cautiously came out themselves, as they were afraid. They destroyed the spoor of the bucks as they came out, so that you can only see the spoor of the men now. You can see the tracks of the men at the mouth of the big hole, if you go and see it. This is the end of the tale.

(4.) *Why the Hare has a Cleft Lip.*

The men of the old time told this story: The moon wanted to send a message to the men of the early race, to tell them that as she died and came to life again, so they would die, and dying come to life again. So the moon called the tortoise; the moon said to the tortoise: "You go over to those men there, and give them this message from me. Tell them that as I dying live again, so they dying will live again." Now the tortoise was very slow, and he kept repeating the message to himself, so as not to forget it. But he forgot it, and so he turned back to ask the moon to repeat it to him. The moon was very vexed with his slowness, and with his forgetting, so she called the hare, and said to the hare, "You are a swift runner. Take this message to the men over yonder: 'As I dying live again, so you will dying live again.'" So off the hare started, but in her great haste she forgot the message, and as she did not wish to show the moon that she had forgot, she delivered the message to the men in this way: "As I dying live again, so you dying will die for ever." This was the message. In the meantime the tortoise had remembered the message, and he started off a second time. "This time," said he to himself, "I won't forget." He got to the place where the men were, and he delivered his message. When the men heard his message, they were very angry with the hare, who was sitting at some distance. She was nibbling the grass after her race. One of them ran and lifted a stone, and threw it at the hare. It struck her right in the mouth, and cleft her upper lip, so that it has remained so ever since. This is why every hare has a cleft upper lip, and it is the end of the tale.

(5.) *Why the Bushmen don't sleep with the Moon in their Faces.*

The Bushmen never go to sleep with the moon in their faces. They never build their huts so that the moon shines in at the door. The reason for that I am now going to tell you. A long, long time ago, a number of Bushmen were encamped

near some water, where they had killed game. The water was much. They were there a long time. During the night when all were asleep, the moon came down to have a look at herself in the water. The moon often did this, but she did not like the Bushmen to see her. One of the Bushmen waking up, saw the moon washing herself in the water. The sight was very nice. So the man awoke some of his friends very quietly. They looked and they were pleased. They laughed softly. But while they were looking at the moon in the water, some of their enemies crept up behind, and before they could seize their weapons, killed them all. The enemies shouted much, and they took all the meat. That is the reason why we never sleep with the moon in our faces, lest this should happen over again, and some people say that if you sleep with the moon shining on you, you will wake up with a great pain in the face. This is the way the moon warns us not to sleep. It is the end of the tale.

(6.) *The Deceitfulness of the Jackal.*

One day, the people say the lion and jackal went to hunt for elands. They came to a bushy place, so they lay down, a little distance apart, for the elands to pass that way. After a time they came, and as they passed each picked out an animal. The lion shot, but he missed his buck. The jackal next had a shot, and he cried out, "I have got my buck," but the lion was very angry at the jackal, and he said, "I have shot and killed the buck, you only missed." Now the jackal was very much afraid, and he said nothing, but quite agreed with him. They went home together, intending to come later on, so as to carry home the eland, after they had had a short sleep, as the sun was quite hot. But the jackal had made up his mind to deceive the lion, and so to get the buck. So when the lion lay down to sleep, the jackal pretended to sleep also; but he soon rose and ran back to the dead eland. He tore open its belly, and creeping into it, he stole all the fat of the inside. To deceive the lion, he made his nose bleed all the way back, so that the lion might think the eland had run off, and might follow the spoor and be deceived. He wanted the lion to go wrong.

The lion awoke, and began to follow the blood spoor which the jackal had made. It led him along the wrong way; but after a time he found the carcase of the eland. At first he could not see the jackal, but he caught sight of his tail sticking out of the eland's belly. He was very angry, and caught the jackal's tail in his teeth, and he swung the jackal out. "Now," said the lion, "you have deceived me, and I won't give you the best part of the meat." "Oh father," said the jackal, "I was just preparing the fat for your wife." Now the lion did not believe him, so he told him to stand back. He proceeded to tear out the inside of the eland. He gave the jackal the fat of the breast, and said to him, "Take this to my wife," and afterwards he said, "You can have this for yourself," handing him the lungs. Now the jackal was very angry, but he took the meat, and went to the den of the lioness. He found her there, playing with the cubs. He said to her, "This is from my father," and he threw the lungs at the cubs, so that they were much afraid, and ran to their

mother for shelter. The lioness was very angry. Then the jackal said, "I must go back to my father, as he is waiting for me." But instead of going back, he called his wife and children from the veld. They all ran away a long distance into the veld, and there he gave them the fat of the eland. They were much pleased with the fat of the eland. So you see this is the reason why a lion will never allow a jackal to feed off the same buck as himself. He always keeps him standing at a distance, and then, when the lion is finished, the jackal takes the meat. This is the end of the tale.

(7.) *The Jackal procures the Hare's Death.*

Once upon a time, as the people say, the jackal persuaded the hare to go with him to be servants to a man, who lived far away. The jackal was hungry, and he wanted to deceive the hare. This man was a hunter, and not long before this, not long before they went to be his servants, he had killed a big buck. He had all the fat of the buck in his house. Now the jackal wanted to steal that fat, but he wanted the man to blame the hare for the theft. So one night, when everyone was asleep, he got up, and ate all the fat. When he had quite finished that fat, he took some of it and he smeared it upon the hare's face, and her fore feet. Then he lay down again. Next morning the man, when he awoke, he missed his fat. Knowing what the jackal's life was, he immediately accused him of being the thief. The jackal at once said, "Not I, look at the hare's mouth, look at her fore feet, and you will see who is the thief." The man was so very angry that he cut a big stick out of the bush, and he caught the hare by the ear. He thrashed the hare so much that she died; but she died saying that she had never eaten any of the man's fat, and that the jackal was a liar. This is the end of the tale.

(8.) *The Bushman's Fear of the Lion.*

You know that we Bushmen are very much afraid of the lion. A long time ago we used to live in caves. We lived in them much more than we do now. That is how we became afraid of the lion. Some men and women were living in a big cave near the Crocodile River. They had lived there for a long time, and the lions had never disturbed them, although the lions were many. The lions used to creep after their game, and they left the people alone. But one night, a very cold and wet night, a lion came to the mouth of the cave, and he began to shout, "I'm hungry, give me one of the children." The people were much afraid, and they kept very quiet; but as he kept on roaring, they began to throw burning sticks at him. He still kept on shouting, "Give me one of the children to eat." At last one man went out with a burning stick and threw it at the lion, to drive him away. But the lion growled at him, and when the man threw the burning stick at him he sprang upon it, and bit it, so that it went out. The lion kept on shouting, "I'm hungry, give me one of the children to eat." Another man went out with a burning stick to drive him away. The lion sprang at him, and he dropped the burning stick. The man was nearly caught by the teeth of the lion. The lion kept on roaring, but

he got nearer and nearer to the mouth of the cave, so that the people could see him plainly. The women and children were very much afraid, and kept pressing up against the back wall. Some of the men wanted to shoot with the bow a poisoned arrow at the lion, but the others said, "If you do so, he will leap into the cave and catch us all." The lion then came right into the cave, and he shouted as before, "I'm hungry, give me one of the children to eat." The fire in the cave was beginning to burn low, as the people were very much afraid to blow it up. Now a man stood up, and seizing a child, flung it to the lion, saying, "There, father, there is meat." The lion caught the child in his teeth. The people were able to escape on both sides of him, and no more of them were eaten. From that day we don't like to live in caves. We build our huts in the open, where if a lion comes we can very easily run away in the darkness, and escape into the bushes. This is the end of the tale.

(9.) *The Lion's Cunning.*

A woman was one day filling her ostrich eggs at a spring, which was covered up with some grass. We Bushmen used to hide the water from our enemies in this way. We hide it by stones, or sticking grass or bushes into it. Now a lion saw this woman a long distance off, and he wanted to eat her. The woman had filled some of her eggs, and as she filled them she put them in a net. She heard some very soft footsteps behind her. Thinking it was some of her friends from the village, she called out, "You must wait for the water to come." Now it was a lion, but the woman did not look behind her to see. When the lion heard her talking he stopped. When she had finished speaking, he said to her, with a terrible roar, "You must leave my water to me." The woman was much surprised, and she rose from her knees to run away. Just at that moment the lion sprang at her. He sprang too high up in the air, and he alighted on the other side. The woman then turned and ran to the bushes, and the lion began to smash the ostrich eggs, which were full of water, crying out, "You must leave my water to me." That is why a Bush woman will not go to a spring alone, and when they go you can hear them singing—

"The lion said with his loud loud voice  
You must leave my water to me."

This is the end of my story.

(10.) *The Wicked Honey Bird.*

The honey bird is a small bird, and flies about trying to tell the Bushmen where the bees have their nests. Now the Bushmen are very fond of the honey of the bees, and sometimes they will climb very high rocks to get at the honey. One day a Bushman had been out hunting, and he killed nothing. He went to sleep under a small tree. A honey bird came and waked him up by calling out, "Come, I will take you where there is a large bees' nest." The Bushman knew that the honey bird always found the bees' nests, and as he was hungry he followed the bird. It led him a very long distance, and he was beginning to get tired, when they came to

the bottom of a very high cliff. There it stopped, and the Bushman began to gaze up at the face of the cliff to find out where the bees were coming out and in. The honey bird was sitting on a branch near by, saying, " You will give me some of the comb." But a lion was watching that Bushman from behind a small bush at the bottom of the cliff, and the man did not see him. Just as the lion was shaking his loins before springing on the man, the Bushman saw him. He turned and ran, and the lion sprang after him. The lion nearly caught him, but the man threw away his bow, his quiver, and his kaross just as the lion overtook him. The lion stopped, growled, and began to tear up the kaross. So the man escaped. That is why we Bushmen are very careful when following the honey bird, and when it stops, we always stand back a bit, and have a look round the place before we venture forward, for fear there might be a lion. That is the whole of the tale.

(11.) *How the Bushmen used to steal the Kafir's Cattle.*

We Bushmen do not have any cattle. We never had any cattle. A long time ago, we used to get cattle from the Bechuanas in this way. We would get on top of a high mountain, so that we could see well where the herds were with the cattle. We liked them to be far from the villages. We would look and see, and we would tell each other where the cattle were. A lot of us would go a long way. We would go silently, so that we would get round on one side of the Bechuanas. We knew they were much afraid of our poisoned arrows. Then some more of us would hide behind bushes and stones, or behind bits of grass, a little in front of the cattle. We would keep perfectly still until the others had got ready. Then when they were about to attack they would throw a handful of dust into the air. Then they would rise up and shout. They would fire some arrows at the herds. We on our side would lie quiet. The herds would say, " Au, Au," and they would rush at the Bushmen to chase them away, and we would rise and run round the cattle, and drive them off, while our friends would fight with the herds. In this way we would get away with a lot of cattle. We would drive them to our secret places in the mountains, where we would kill and eat them. We never kept them. Sometimes the Kafirs would pursue us. They would come because they were angry, and because they were many. Then sometimes we would have to leave the cattle and run away and save ourselves; but as soon as we saw the Bechuanas coming we always tried to kill as many of the cattle as possible, so that when the Bechuanas came they would not find any alive to drive away. Then when they had gone home, we would come down again and eat the meat; but sometimes the Bechuanas were too strong for us, and drove us off, killing some of us, or they would get our wives and children, and take them away. This is what I know of cattle stealing. It is the end of the tale.

(12.) *What we thought of the White Man's Wagons.*

The first time we saw wagons was when the *khui* (Trek Boers) went up to Ngabé (Lake Ngami).<sup>1</sup> We thought the wagons were big animals. There were

<sup>1</sup> The Bushmen call Lake Ngami *Ngabes*, the giraffe.

many oxen going before, and these big animals were going after, as we thought. Some of the old Bushmen had seen such things before. They looked like elephants, but they were white. We watched them a long time, and we saw that some of them stopped. There was not much rain that year, and the grass was not good. The oxen were thin, and then they died. Many died before they got to the lake, and sometimes we had some of the flesh. At last one day we saw some of the *þkhuñ* take all the cows out of the wagon, and leave it on the veld. We were afraid to go near it. We thought they had left it to graze, but we saw that its feet did not move. Some got near then, and we looked in. There were lots of things inside, but we Bushmen did not know their uses, and so we left them. We found some dry meat, which we took. Then we went on after the others, and by and by we were near to the wagons, so the *þkhuñ* got their horses and they galloped after us. Three of us were caught. They tied up our hands, and they told us to take them to the water. I was young then. They tied us up at night, but one of us got away in the darkness. After a time all the cattle died of sickness, and the *þkhuñ* got sick and died too. They left the wagons. At first when we saw them they were living in the wagons. Many of the *þkhuñ* were killed, many died, and others went away. Some of the women were taken by the *ghare* (Bechuanas), but I don't know what they did with them. We Bushmen never killed any of these people, but we took their cattle and ate many of them. The wagons died on the veld, and some of them were burnt. That is what I knew of the *þkhuñ*. It is the end of the tale.

(13.) *The Bushmen's Fear of the Lightning Bird.*

The Bushmen when they see a lightning bird (*Scopus umbretta*) flying over them are much afraid, and they think that the lightning is coming. They say that the next time it lightens, the bird will come to look for its nest, and they may be killed. If the Bushmen are drinking at a pool in the river, and the lightning bird flies over them they immediately leave off drinking at that place. This bird has a strange cry, and when we hear it at night we are much afraid. We don't imitate the cry of the bird as we do those of some other birds, as we are very much afraid of its coming to look for us. This bird makes a big nest, but we never go near the place, and we do not rob its nest, as we do the nests of other birds. The Bechuanas are very much afraid of this bird, and do not rob its nest or eat its flesh.

(14.) *The Bushman and the Jackal.*

The silver jackal is a very deceitful animal, but he has a nice skin, and we like to wear it very much. Well, one day a Bushman saw a silver jackal killing a small buck. The Bushman shot at the jackal with his bow, and missed him, but he did not know that. The jackal pretended to be dead, and when the Bushman stooped down to pick him up, he suddenly jumped up and ran off saying. "You thought to get my skin to wear, but I am not going to be caught." We always watch the jackal.

(15.) *How we get our Wives.*

I have told you that when we want to marry, we must make a present to the girl's father. We must go into the veld and kill an animal. Now the man who wants the best girl will try to kill a fat buck, but he may try to kill a lion or a leopard. If he kills a lion all the people praise him, and say what a brave man he is, and he gets a nice girl. They just go and live together after that. A man must at least kill a springbuck or a duiker before he can get a wife. No buck, no wife. That is how we get our wives.

(16.) *The Rabbit and the Tortoise.*

One day the rabbit said to the tortoise, "Let us run a race," and the tortoise said, "All right." Now the tortoise being a slow runner, made up his mind to tell all his friends to help, and they said, "We will." Now they all came, so before the race started he put one about every hundred yards or so. Then they began to run. The rabbit ran very fast, and then called out, "Where are you?" and the first one shouted out, "Here I am." So off he ran again and went on for a bit and shouted out, "Where are you?" and the second one answered, "Here I am." So he started off harder again, and after a bit, feeling sure he had outrun the tortoise, he called out, "Where are you now?" and the third one answered, "Here I am." The rabbit ran on to the winning-post and again called out, "Where are you?" and a tortoise sitting at the winning-post called out, "Here I am." The rabbit was surprised, but he said, "Shake hands, you are a very slow runner, but you have beaten me this time. I asked you to run a race, as I was sure I could leave you behind."

## TERMS OF RELATIONSHIP.

The relationship terms given below were obtained at Dr. Seligman's suggestion, with the help of a list he supplied. The Masarwas are not very clear upon terms of relationship, only the very near relations having special terms. Omissions in the list indicate this.

(m.s.)=man speaking.

(w.s.)=woman speaking.

father, *bara*.father's sister's husband, *chiba gweke*  
|*gaicho*.mother, *mara*.father's sister's child, *chiba gweke* |*gwa*.elder brother (m.s.), *chitata*.mother's brother, *chitata*.

elder brother (w.s.).

mother's brother's wife, *babara em*  
|*gaicho*.elder sister (m.s.), *chi gweke*.

mother's brother's child.

father's brother, *chi baba*.mother's sister, *mara*.father's brother's wife, *bara thata*  
|*gaicho*.mother's sister's husband, *bara*.father's brother's child, *chiba* |*gwa*.mother's sister's child, *chidagho*.father's child, *chi* |*gwa*.father's father, *bakhacha*.father's sister, *chiba gweke*.

TERMS OF RELATIONSHIP—*contd.*

father's mother, <i>mae</i> .	husband's brother's child.
mother's father, <i>bawara</i> .	brother's child (w.s.), <i>chi  gwea  gwea</i> .
mother's mother, <i>mae</i> .	wife's brother's child.
husband, <i>kaucho</i> .	sister's child (m.s.), <i>chi gweke  gweae</i> .
wife's father, <i>bae</i> .	husband's sister's child.
wife's mother, <i>mae</i> .	sister's child (w.s.), <i>chi gweke  gwea</i> .
husband's father, <i>bae</i> .	wife's sister's child.
husband's mother, <i>mashe</i> .	son's child (m.s.), <i>chi  gwea  gwea</i> .
wife's brother, <i>chi chuwaho</i> .	son's child (w.s.), <i>chi  gwa  gwa</i> .
wife's sister, <i>chi gweke</i> .	daughter's child (m.s.), <i>chi  gwa  gwa</i> .
husband's brother, <i>chidagho</i> .	daughter's child (w.s.), <i> gwa</i> or <i>do</i> .
husband's sister, <i>chi gweke</i> .	wife, <i> gaicho</i> .
wife's sister's husband, <i>kaucho</i> .	daughter's husband (m.s.), <i>kaucho</i> .
husband's brother's wife, <i> gaichwe</i> .	daughter's husband (w.s.), <i>kaucho</i> .
son's wife's parents, <i> gamthiare ?  tsao</i> .	son's wife (m.s.), <i> gaichwe</i> .
son, <i> gwa</i> .	son's wife (w.s.).
daughter, <i> gai  kwa</i> .	sister's husband, <i>kaucho</i> .
younger brother (m.s.), <i>chidagho</i> .	sister's husband.
younger sister (m.s.), <i>chi gweke</i> .	brother's wife (m.s.), <i> gaicho</i> .
younger brother (w.s.), <i>chi chuwaho</i> .	brother's wife (w.s.).
younger sister (w.s.), <i>chi gweke</i> .	parents, <i> gam chware</i> .
brother's child, <i>chi  gwea  gweae</i> .	kindred, <i> gwa  gwari</i> .

## NAMES OF ANIMALS.

Species.	Sesarwa.
<i>Elephas africanus</i> .	<i>Chowa</i> .
<i>Rhinoceros bicornis</i> .	<i>Gaba</i> .
<i>Rhinoceros simus</i> .	<i> Khii</i> .
<i>Equus quagga</i> .	<i>Koha (?)</i>
<i>Equus burchelli</i> .	<i>Koha (?)</i>
<i>Equus zebra</i> .	<i>Koha</i> .
<i>Bos caffer</i> .	<i> Hao</i> .
<i>Bubalis caama</i> .	<i> Kama</i> .
<i>Damaliscus lunatus</i> .	<i>Nuehu</i> .
<i>Connochaetes gnu</i> .	<i> Kee</i> .
<i>Cephalophus grimmi</i> .	<i>Khoa</i> .
<i>Oreotragus saltator</i> .	<i> Kaisi</i> .
<i>Antidorcas euchore</i> .	<i> Khaie</i> .
<i>Oryx gazella</i> .	<i> Khio</i> .
<i>Hippotragus niger</i> .	<i>Ju  khoa</i> .
<i>Hippotragus equinus</i> .	<i>Hue  khoa</i> .

## NAMES OF ANIMALS—contd.

Species.	Sesarwa.
Taurotragus oryx.	<i>Du.</i>
Strepsiceros capeusis.	<i>Dham.</i>
Giraffa camelopardalis.	<i>Gabee.</i>
Hippopotamus amphibius.	<i>Kubu (S.).</i>
Felis leo.	<i>Kham.</i>
Felis pardus.	<i>Uwe.</i>
Felis serval.	<i>Gurijwa.</i>
Felis ocreata.	<i>Kuru.</i>
Felis nigripes.	<i>Nakedi (S.).</i>
Cynaelurus jubatus.	<i>Khao.</i>
Viverra civetta.	<i>Tsamba.</i>
Hyaena crocuta.	<i>Isa.</i>
Hyaena striata.	<i>Dini kwa na.</i>
Lycaon pictus.	<i>Aba.</i>
Canis lupaster.	<i>N'gaa.</i>
Canis mesomelas.	<i> Gire.</i>
Orycteropus afer.	<i>  Ghamee.</i>
Lepus capensis.	<i>Jobi.</i>
Lepus saxatilis.	<i>Dharu.</i>
Lepus crassicaudatus.	<i>Solokolije (S.).</i>
Pedetes caffer.	<i>Joo.</i>

## III.—VOCABULARY.

NOTE.—In the following pages (and also above) the letter (S.) indicates that the word is borrowed from Sechuana, either wholly or in a modified form. No indication has been given where the word was originally Bushman, and then re-introduced into Sesarwa through the medium of Sechuana. This would be an interesting study of itself:—

<i>aa</i> , yes.	<i>abo tsikho</i> , ladder, steps.
<i>aa</i> , to understand.	<i>abuchu</i> , a skin for carrying a child.
<i>aba</i> , to carry over the shoulder.	<i>a chio kham</i> , a lion's lair.
<i>aba</i> , a dog.	<i>ae</i> , home.
<i>aba</i> , a potato.	<i>aseka</i> , at home.
<i>abaa</i> , to bear a child.	<i>aekwa</i> , not at home.
<i>abaa kakho</i> , to saddle.	<i>a ho chwaho</i> } from that day ever after-
<i>abae</i> , birth.	<i>a hu chwaho</i> } wards.
<i>abaho</i> , to bear (used of cattle).	<i>a hu</i> , with.
<i>aba tsikho</i> , a burden.	<i>a hu chwa</i> , like, as.
<i>abo</i> , to ride, climb.	<i>a hu yi</i> , and.
<i>abo</i> , to rear, as a horse.	<i>a hui   kne</i> , to join with.

VOCABULARY—*contd.*

<i>a hu ka</i> , about, concerning.	B.
<i>aie</i> , a town, village.	<i>baba shale</i> , mange, scab.
<i>aie   kwa</i> , the lid of a pot.	<i>bae</i> , my father (pl. <i>bare</i> ).
<i>ao</i> , a kraal, village.	<i>babao</i> , a bed (S.).
<i>ao jube</i> , a cow in the kraal.	<i>baka shale</i> , a nettle.
<i>am</i> , to believe, assent to.	<i>baki</i> , a coat.
<i>am</i> , belief.	<i>balesa</i> , a bitch.
<i>ama</i> , a dish, pot, plate.	<i>banchwa</i> , quite, really, of a truth.
<i>ama  ho</i> , a small pot.	<i>bara</i> , father (pl. <i>ba   kwa</i> , irreg.).
<i>ama  hwe</i> , a water pot.	<i>bara</i> , a harvest.
<i>ama   kwa</i> , a small pot.	<i>bara</i> , a rainy season.
<i>am chu</i> , to agree.	<i>barako</i> , autumn.
<i>am chuu</i> , agreement.	<i>barathi</i> , green.
<i>am tsikho</i> , clothes.	<i>bee</i> , to hiss.
<i>an</i> , to ripen.	<i>bee</i> , to persuade.
<i>an</i> , to know.	<i>bee</i> , to burden too much.
<i>ana</i> , to be ripe.	<i>beeba</i> , to abound.
<i>anaka</i> , knowledge.	<i>behua</i> , impossible.
<i>anuo</i> , to mend a hole in a blanket.	<i>behua</i> , useless.
<i>anēē</i> , to clothe, dress.	<i>bela</i> , to boil.
<i>anegho</i> , a door.	<i>bele</i> , the bank of a river.
<i>ane kakho</i> , to clothe, dress another.	<i>berekathi</i> , a carpenter.
<i>ano</i> , to curse.	<i>beyo</i> , unable.
<i>ano</i> , to take out.	<i>biane</i> , a grasshopper.
<i>ano</i> , a public meeting.	<i>biba</i> , baggage, skins for houses.
<i>ao</i> , to dodge.	<i>biba chwakha</i> , to be naked.
<i>ao</i> , to coo as a dove.	<i>biba sehe</i> , a debt.
<i>ao ao</i> , to frighten.	<i>bibara</i> , goods, chattels.
<i>ao cho</i> , a coward.	<i>bibara   kwakha</i> , to scatter about goods, to plunder.
<i>are yehua</i> , to work.	<i>bii</i> , to bark, howl as a dog.
<i>aru</i> , namely, to wit.	<i>Birwa</i> , the Makaranga.
<i>atha</i> , to increase (S.).	<i>bokobo</i> , tame (S.).
<i>atha e i teme</i> , nevertheless.	<i>bokoo</i> , a worm.
<i>athe oo</i> , instead of.	<i>boloo</i> , a ball of hair in the stomach of an animal.
<i>a thee thama</i> , to say to.	<i>boobi</i> , a spider's web.
<i>au</i> , to fear.	<i>boo   ka</i> , an axe handle.
<i>au</i> , to scream, shout, make a noise.	<i>boori</i> , a word, tale, legend, conversation
<i>aughwe</i> , blunt, round.	<i>bore</i> , gentle.
<i>auo</i> , fear.	<i>borethe</i> , flat, slippery.
<i>aux</i> , a quiver.	
<i>auu</i> , a tarantula.	

## VOCABULARY—contd.

<i>bori</i> , strife.	<i>charo</i> , a wait-a-bit thorn.
<i>buri</i> [kuu], a net for ostrich eggs.	<i>charoo</i> , mirth.
<i>bzela</i> , to sow.	<i>charoo</i> , to plead with.
<i>bzelathi</i> , a sower.	<i>che</i> , to lead.
C.	
<i>cha</i> , to forbid.	<i>che</i> , liver.
<i>cha</i> , thou, you.	<i>che</i> , to pull.
<i>cha</i> , to dip in water.	<i>che abe</i> , no, not.
<i>chan</i> , to enter, go in.	<i>che che</i> , to give ear to, hear.
<i>chaa</i> , mattress, sleeping skin.	<i>che chercho</i> , to spit.
<i>chabe</i> , green.	<i>chee</i> , pull through.
<i>cha cha</i> , to lift up.	<i>chee</i> , to hang up.
<i>cha chawa</i> , to give oneself to.	<i>chee</i> , the ear.
<i>chae</i> , to put in.	<i>chee</i> , spittle.
<i>cha hai</i> , enemies.	<i>chee</i> , to make tobacco.
<i>chaha n yai</i> , to push sticks into a fire.	<i>chee khaha</i> , also.
<i>chahi nyabe</i> , to frown.	<i>chema chema</i> , to flavour.
<i>chai</i> [gaeka nywaho], to pretend.	<i>chen</i> , to hide.
<i>chai</i> [gaeka gauhe], to restrain oneself.	<i>chenaa</i> , a crocodile.
<i>chai</i> [gu] [gu], to open the eyes wide.	<i>chenee</i> , to patch.
<i>chai</i> [hayo], eyebrow.	<i>cheo</i> , a rod, a stick.
<i>chail</i> , eye.	<i>cherekho</i> , a tick.
<i>chai khai</i> [khuri], seed.	<i>chi</i> , so that.
<i>chai onam</i> , blind.	<i>chi</i> , I, me.
<i>chai tsom</i> , tears.	<i>chi</i> , to entice.
<i>cha ka</i> , by means of.	<i>chi chwaho</i> , my brother.
<i>cha kuu</i> , a battle-axe.	<i>chi</i> [gwa], my child.
<i>cha kue</i> , please.	<i>chii</i> , to be sick, ill.
<i>cha</i> [kae] <i>kue</i> , to answer for oneself.	<i>chii</i> , to call.
<i>cha kui</i> , the eyes.	<i>chi</i> [kwe], lord, chief, king.
<i>cha kai</i> [khom], to close the eyes.	<i>chi</i> [kwereha], I am hungry (exclamation).
<i>cha ke</i> , to nurse.	<i>chin</i> , a locust.
<i>cha ke sena</i> , to forget.	<i>chin</i> , a spoon.
<i>cha khai khon</i> , a fly.	<i>chima chima</i> , to add to.
<i>cha khanuthi</i> , a spy.	<i>chima chimu</i> , to smear.
<i>cha khna</i> , to create.	<i>chini</i> , a funeral.
<i>cha koca</i> , to bend.	<i>chio</i> , to beckon to.
<i>chana</i> , to search.	<i>chio</i> , sickness.
<i>chara</i> , a thorn tree.	<i>chio</i> , a call.
<i>charana</i> , to plug.	<i>chi oo</i> , to wipe.
<i>charihe</i> , damp.	<i>chira</i> , I (emphatic).
	<i>cho</i> , a person.

VOCABULARY—*contd.*

cho, yellow wood tree.	choo, leather.
cho, good, goodness.	chora, to rescue.
cho, skin.	chora, to release (as captured cattle).
choat, to come out.	chorake, to deliver.
cho aha, wet.	choro, a skin blanket, kaross.
cho aho, to cause to move.	choro, to decay, rot, corrupt.
choa ju, a Bushman's hut.	choro, rottenness, pus.
cho aue, the pericardium.	cho tsiau, to be unkind to.
chobaa, a garden.	chou, to buy.
chobche tsua, warm water.	chou, to doctor.
chochoe, slowly.	chou ee, to be doctored.
chochu, to amaze.	chou  kia, a hillock.
{ cho hi dacha, wild hemp.	chowa, an elephant.
choii dacha, wild hemp.	chowa  kwa, a young elephant.
cho kahe, an abscess, a boil.	chowa tsau, an elephant's trunk.
choi kakho, to become zealous.	choue, a man.
cho ka jeme, to be vexed.	chu, to acquire.
cho kakho, to sell.	chu, dung.
cho kau, a bag for medicine.	chu, perhaps.
cho khaa, to outspan.	chui, the nose.
choko, Kafir corn, millet.	chui n gaa, bone of the nose.
chom, to feel, hear.	chuni, an elbow.
cho mama, goodness.	chuno, to go round a thing.
chom he, to understand.	chari, a year.
chom kakho, to be heard, understood.	churu, to make room.
chomo, hearing, obedience.	chuu, dried cow dung used as fuel.
chompe, deaf.	chwa, a person.
chon, to wrestle.	chwa, to go out.
chon, to shake.	chwa, to break.
chonita, mucus.	chwa, to take the foot off anything.
chonaha, to be out of joint, broken.	chwaho, a carbuncle.
chonama, probably.	chwa khau, good hearted.
chone, a wizard.	chwakho, to put away, to undress.
chone, to distribute.	chware   gau   gau, to oppose people.
chonee, to blow the nose.	chware  kati, to itch.
chononya, slanting, crooked.	chicare nyaha, openly, in the sight of.
chonya, to be surprised.	chwi, the nose.
cho nyuahlo, wait a bit!	chwi kholo, the nostrils.
choo, defiance.	D.
choo, charms.	daba, to tease, vex.
choo, to roast.	dahwa, to be drunk.
choo, the heart.	

VOCABULARY—*contd.*

<i>dana</i> , childhood.	<i>dithong</i> , shame (S.).
<i>danacho</i> , a girl, unmarried woman.	<i>dom</i> , the throat.
<i>dano</i> , to atone.	<i>doro</i> , to bore.
<i>davo</i> , to dry up.	<i>du</i> , an eland.
<i>dara</i> , a finger nail.	<i>duba</i> , to tread.
<i>daroha</i> , to have stomach ache.	<i>due</i> , to become dark.
<i>debe</i> , salt.	<i>duela</i> , to defend oneself (S.).
<i>debe</i> , a mark.	<i>diva chon sime sime</i> , a white cutter ant.
<i>debe debe</i> , to enlighten.	<i>divee duche</i> , to abate.
<i>debee</i> , a salt pan.	<i>divee</i> , young.
<i>dene</i> , to lick up the remains of food.	<i>divee cho</i> , a dwarf.
<i>denee</i> , a bee, honey.	<i>divee giea</i> , a youth.
<i>denee  gene</i> , the honey bee.	<i>diveha</i> , portion, a piece.
<i>denee khoro</i> , a bees' nest in the ground.	<i>divee yuro</i> , a young rock dove.
<i>denee shuru</i> , beeswax.	<i>divee zera</i> , a nestling.
<i>deneho</i> , to finish.	<i>diveee</i> , round about.
<i>dhabu</i> , to cover.	<i>dwee</i> , a little.
<i>dham</i> , the tongue.	<i>dyuu</i> , a bustard.
<i>dham</i> , an opening.	<i>dzibi</i> , strife.
<i>dham</i> , a tortoise.	<i>Dzimo</i> , God.
<i>dham chio</i> , a liar.	
<i>dham dham</i> , to tame, make a pet of.	
<i>dhamo</i> , to tell lies.	E.
<i>dham  ku</i> , a small tortoise.	<i>e be be</i> , it is not he (exclamation).
<i>dham  kwio</i> , the larynx.	<i>e be we</i> , is it she (exclamation).
<i>dhaa</i> , to pay.	<i>ebe i ye</i> , to stand over.
<i>dhan</i> , to burn.	<i>ebe ng ge</i> , to dispute.
<i>dharu</i> , a path, a road.	<i>ebe no   ka</i> , a white mimosa.
<i>dhanu</i> , a small hare.	<i>echu ahe</i> , to dust.
<i>dhanu   ku   ghati</i> , a guide.	<i>e  dhanu</i> , a scar.
<i>dhanu tsikho</i> , wages, pay.	<i>eeba</i> , this person.
<i>dhauo</i> , to set on fire.	<i>eechu</i> , to be like.
<i>dhebe</i> , lightning.	<i>eh</i> , to deserve.
<i>dhebe dhebe</i> , a lamp, candle.	<i>eh ahe</i> , to happen.
<i>dhiri</i> , to pour out as water.	<i>ehua</i> , hither (motion).
<i>dhoa</i> , grass.	<i>ehua  gam</i> , to have a friend.
<i>dhom</i> , the neck.	<i>ehua n  gnew</i> , not yet.
<i>dhuba</i> , to try to do a thing.	<i>ehua nya</i> , it will be, must be.
<i>dhwe</i> , to remove.	<i>ehux</i> , be nothing at all.
<i>dina</i> , to delay, tarry (S.).	<i>ekade</i> , to turn round.
<i>dia cho</i> , a clever person.	<i>e  kam</i> , gunpowder.
<i>dini kua na</i> , a striped hyena.	<i>e kha</i> , it was of old.
	<i>eko</i> , to scoop out.

VOCABULARY—*contd.*

<i>ekwa</i>    <i>kho</i> , venomous, deadly.	<i>!gabe</i> , to advise, advice.
<i>e ma khae!</i> is it right?	<i>gabe</i> , a giraffe.
<i>emdhé</i> , his, hers.	<i>gabe</i>    <i>gau</i> , a solitary bull giraffe.
<i>em</i>    <i>gaicho</i> , wife, husband.	<i>!gabe</i> <i>gabe</i> , to take advice.
<i>em ke kho!</i> begone!	<i>gabe</i>    <i>khaine</i> , the Southern Cross.
<i>emoo</i> , a measure.	<i>gabi</i> , to change, turn over.
<i>emoo</i> , an observer.	<i>gabi gabi</i> , to be changeable.
<i>ena</i> , to journey.	<i>gabi heice</i> , a change.
<i>enwa</i> , here at this place.	<i>gabi nya</i> , to obtain.
<i>enwa</i>    <i>ku</i> , to come near to.	<i>!ga cho</i> , to brawl, to fight.
<i>enwa ya</i> , to come here.	<i>!gadi</i> , a sinew.
<i>erwa</i> , there.	<i>!gae</i> , a female.
<i>esee</i> , to reign.	<i>!gae</i> , to chew the cud.
<i>eta</i> , when.	<i>!gae kho</i> , a dowry, marriage cattle.
<i>etsoro</i> , a dewlap.	<i>gai</i> , cannot.
<i>ewa</i> , to mention.	<i>gaiai</i> , to despise.
<i>eye</i> , sweet.	<i>!gaicho</i> , a woman.
F.	
<i>fiela</i> , to sweep (S.).	<i>!gaicho</i>    <i>kho</i> , to divorce a woman.
<i>fofa</i> , to fly (S.).	<i>!gaichu</i> , lean, thin.
G.	
<i>!ga</i> , to be satisfied.	<i>!gaie</i> , to aim at with a bow.
<i>gaa</i> , to raise the head.	<i>gaie</i> , a steimbok.
<i>gaa</i> , to lean on.	<i>!gaie</i> , the cheek.
<i>gaa</i> , an awl, a needle.	<i>!gaie</i> , to visit.
<i>gaa</i> , a peg of wood, block.	<i>!gaie</i> , to smile.
<i>gaa</i> , an effort.	<i>!gaiebaru</i> , the calf of the leg.
<i>!gaa</i> , to fight.	<i>!gaichware</i> , strangers.
<i>!gaa</i> , to dislike, offend.	<i>!gaiechwe</i> , a woman.
<i>gaa</i> , <i>chicare</i> , an inheritance.	<i>!gaicha</i> , chief, king.
<i>!gaba</i> , famine.	<i>!gaieha</i>    <i>kwa</i> , prince, chieftain.
<i>gaba</i> , a rhinoceros.	<i>!gaiehan</i> , kingdom.
<i>gaba</i> , a friend.	<i>!gaiehe</i> , to be bent.
<i>gaba chon</i> , friendship.	<i>!gaiehe</i>    <i>kwa</i> , a chieftain.
<i>gabae</i> , to be a friend.	<i>!gaicho</i>    <i>gaicho</i> , queen, chief's wife.
<i>gaba kho</i> , a custom.	<i>gaiethi</i> , a servant.
<i>gabao</i> , to be friendly with.	<i>!gaiha</i> , to draw lots.
<i>!gabara</i>    <i>kam</i> , to flap the wings.	<i>gaihe</i> , warmth.
<i>!gabara</i>    <i>kau</i> , to chop branches.	<i>gaii</i> , a puff-adder.
<i>!gabau</i>    <i>kau</i> , to accustom to.	<i>!gai ka cha</i> , to pass through.
	<i>!gai ka nyin he</i> , to esteem, think well of.
	<i>!gai</i>    <i>kwa</i> , a daughter.
	<i>!gai</i> , great heat.

VOCABULARY—*contd.*

<i>Gaisi</i> , a Koranna.	<i>gan kakhe</i> , to make peace.
<i>gaithi</i> , a visitor, stranger.	<i>gano</i> , a building.
<i>gaiye</i> , a ringhals.	<i>gano</i> , an ostrich.
<i>gaiwa</i> , in the middle of, between.	<i>ganse</i> , to run.
<i>ga ka</i> , to show, point to.	<i>ganthi</i> , a doubter.
<i>ga kai</i> , to show to, instruct.	<i>ganthi</i> , a builder.
<i>ga khai</i> , to give evidence, confess.	<i>gantwi</i> , severe pain.
<i>gala</i> , a courtyard.	<i>gao</i> , to become old, old age.
<i>gam</i> , to cast away.	<i>gao</i> , to hide, conceal.
<i>gam</i> , an oath.	<i>gao</i> , to speak.
<i>gam</i> , to swear an oath.	<i>gao</i> , a snake.
<i>gam</i> , to wish.	<i>gao</i> , to plough.
<i>gam</i> , to punish, beat.	<i>gao</i> , to pass by.
<i>gam</i> , to love, covet.	<i>gao</i> , to plough, dig, cultivate.
<i>gam</i> , a louse.	<i>gao</i> , to peg out a skin to dry.
<i>gam</i> , ugly.	<i>gao cho</i> , an old person.
<i>gam</i> , a point, a side.	<i>gao geo</i> , the trail of a snake.
<i>gama</i> , to swear.	<i>gao-ju</i> , a green tree snake.
<i>gama</i> , danger.	<i>gao kwa</i> , a small black cobra.
<i>gama</i> , to love.	<i>garu</i> , scab.
<i>gamacha</i> , to beseech.	<i>gara</i> , a letter, epistle.
<i>gama kho</i> , to throw away.	<i>gara</i> , a finger nail.
<i>gambi</i> , dislike.	<i>gara</i> , to scatter.
<i>gam chware</i> , parents.	<i>garama</i> , to splinter.
<i>gamee</i> , a bow.	<i>gari</i> , thatch.
<i>gam gam</i> , to grope.	<i>garii</i> , to creak, buzz, croak.
<i>gam gam</i> , to knock, grope about.	<i>garii</i> , to caress.
<i>gam ho nye</i> , to be lost.	<i>garinye</i> , the stump of a tree.
<i>gamo</i> , the truth.	<i>gariyi</i> , to roar, bellow.
<i>gamo</i> , birth.	<i>garo</i> , a cock ostrich.
<i>gamohoghe</i> , loss.	<i>garoha</i> , to freeze.
<i>gamthi</i> , a lover, friend, parent.	<i>garo ibi</i> , an ostrich egg.
<i>gan</i> , to doubt, complain.	<i>gatsano</i> , a bowl.
<i>gan</i> , grapes.	<i>gau</i> , to forbid.
<i>gail</i> , to build, live, dwell.	<i>gau</i> , to escape.
<i>gana!</i> don't!	<i>gau</i> , a youth, young man.
<i>gana</i> , a leaf.	<i>gau</i> , a bubble.
<i>ganaa</i> , the husk, peel of a fruit.	<i>gau</i> , government.
<i>gana tsikho</i> , a pillow for the heat.	<i>gau</i> , to stop.
<i>gane</i> , a beard.	<i>gau</i> , to clean.
<i>gane</i> , an eagle.	<i>gauau</i> , cleanliness.
<i>gane</i> , guinea fowl.	<i>gau cho</i> impudent.

VOCABULARY—*contd.*

‡gau ‡gau, to make clean.	ghii, to dance.
gau   gau, to be uncertain.	ghithi, a dancer.
‡gau-nyom, to be wise.	ghobe, a frog.
‡gau-nyomo, wisdom.	ghom, to cover.
gau, a snake.	ghomakho, to greet a person.
gau, a curtain.	ghom tsikho, a cover.
gau tha chu we, to be safe.	ghoo, to undress.
gau tha gwi, to fix safely.	ghoo, to catch, to seize.
‡gawa, to expect.	ghowa, to move out of the way.
gee, to pass.	ghoewe, the last.
gee, to count.	ghu, a thing.
gei, to commit adultery, adultery.	gie, to-day, now.
geithi, an adulterer.	gie anao, seeing that.
genee, a fly, a bee.	gii, to shave, to cut one's hair.
ge nyom, to scold.	gire, a silver jackal.
gewa, to put into.	!Giri, the Matebele.
geye, red.	gire  kwa, a young silver jackal.
ghaa, to be mad.	giri  tsau, veld in the dry season.
ghaa, to try.	go, a feather.
Ghaa, a Mosuto, a Mochuana.	go, an antbear.
ghaa cho, a madman.	go, to comfort.
ghaau, madness.	goa, to be spilled.
ghabe, to go astray, to wander.	goa, a mountain.
ghabeo, a mistake.	goa dhororo, a mountain top.
ghadie, a muscle.	goa nyimo, the top of a mountain.
ghaie, a worm.	goaho, to restore.
ghaie, to go a journey.	goao jobi, a rock hare.
ghaiye, to fall.	gobo, mud, mortar.
ghaiyo, a journey.	gobu chwaho, to foam at the mouth.
gham, the sun, the light.	go   cho, to melt.
gham, a day.	gocho koma, a koorhan.
gham, a basket.	goha, a flea.
gham chio, sunset.	gohe, to kill oneself.
gham chwa, sunrise.	goho, a cave, a shelter.
ghamee, an antbear.	goho, an island.
ghañ, to enclose with a fence.	goju, happy.
ghanee, the chin, the jaw.	gokho, to become mad.
ghano, moss.	gole, to open.
Ghare, Basutos, Bechuanas.	golele, to cause to open.
ghari, thunder.	golo, the ankle.
ghau, a plough.	golo  gv, to lie in the sun.
ghau, to perspire slightly.	gom, to pull up.

VOCABULARY—*contd.*

- gom*, to blow as the wind, to smoke.  
*lgom*, to sleep.  
*gom*, the soul.  
*goma*, a python.  
*gomase*, to snatch.  
*gom cho*, a dwarf, a small person.  
*gomgha*, to smother.  
*gom jina*, a dunify.  
*gon*, to scrape up together.  
*gonakho*, to spill.  
*goa*, to be silent.  
*goa*, to murder, kill, defeat, conquer.  
*goa*, war, slaughter, conquest, murder.  
*goa*, to drive away.  
*goa*, to detain.  
*lgoa*, mimosa, gum of the mimosa.  
*goe*, an enemy.  
*goe*, silence, stillness.  
*goe*, a battle, a fight.  
*lgoe*, a tooth.  
*lgoe lka*, toothache.  
*lgoe lku*, consumption, cold in the chest.  
*lgoe nyu*, to trust.  
*goothi*, a murderer.  
*goothi*, a comforter.  
*goothi kakha*, comfort.  
*gore*, the backbone.  
*gorika*, after.  
*goren lqua*, a joint of the backbone.  
*goren lgaka lkwe*, to bend the back, to lie down.  
*gorothi*, a tanner.  
*gorn*, to pour out slowly.  
*gothi*, a silent person.  
*gowe*, big, large.  
*guhe*, to move.  
*gui*, oil.  
*gnika*, the crown of the head.  
*gukicau*, a milk skin.  
*gum*, to crush.  
*gum chana*, to visit a sick person.  
*guneho*, behind.  
*guno*, far.  
*lzure ka nukwe*, to go back.  
*guri*, to injure, to mock.  
*guri-ama*, to damage.  
*gurico*, backwards, behind.  
*gurihe*, to perish.  
*guriho*, destruction.  
*guri-jica*, a tiger cat.  
*guri nlywa*, the spinal cord.  
*gurinya*, to become destroyed.  
*gurithi*, a destroyer, a mocker.  
*guriyo*, an injury.  
*guru*, to destroy.  
*guru*, cold.  
*gurnica*, to be cold.  
*guu*, near.  
*guu*, to float down a river.  
*guu*, dust.  
*guu gu*, to watch.  
*guwe*, time.  
*gugu*, a cup, a drinking vessel made of gourd.  
*gwa*, a son, a child.  
*lgwa*, a stone.  
*lgwa*, not a bit of it.  
*lgwan*, a grave.  
*gwa chari cho*, a one-eyed person.  
*guae*, to return to.  
*gwa gwan*, a little child.  
*gwa gware*, a family, kindred.  
*gwa kicware*, a cairn, a heap of stones on a grave.  
*gwa ona be cho*, a childless person.  
*gweea*, full.  
*gweac*, to lie in wait for game.  
*gweai*, trouble.  
*gweai*, to watch.  
*gwee*, a porcupine.  
*gwee*, the moon.  
*gwee lkam*, a porcupine quill.  
*gweka*, again.  
*gweke*, a woman's sister or brother.

VOCABULARY—*contd.*

<i>gwere</i> , to stir.	<i>kie</i> , to do.
<i>gwerocho</i> , afterwards.	<i>hi</i> , a tree, medicine.
<i>gwere  kwa</i> , back.	<i>hi  kwa</i> , a bush, or shrub.
<i> guci</i> , fat of an animal.	<i>hi   kau</i> , to chop, cut down a tree.
<i>gwi cho</i> , to touch each other.	<i>hie</i> , the open country, the veld.
<i>gwi cho kakho</i> , to have touched each other.	<i>hie cho</i> , a Mosarwa.
<i>gwi  yamka</i> , to make a heap of anything.	<i>hie cho kwio</i> , the Seserwa language.
<i>gwi gwa   gwa</i> , to be giddy.	<i>hipe</i> , an axe.
<i>gwi kakho</i> , to speak to.	<i>hma</i> , the head.
<i>gwii</i> , a string or rope made of grass.	<i>hmee</i> , to smell.
<i>gwii</i> , a bridle.	<i>hmtswi</i> , to smell anything.
<i>gwii</i> , a body.	<i>ho</i> , nothing.
<i>gwii   gaie</i> , to burn charcoal.	<i>hoba</i> , to bend (S.).
<i>gwiya</i> , alone.	<i>hoe</i> , to be asleep.

## H.

<i>hua</i> , there.	<i>ho kham</i> , a large maned lion.
<i>habe</i> , shall.	<i>ho   ke</i> , to reject.
<i>habee</i> , come here.	<i>hola</i> , to thresh.
<i>habela</i> , a string apron.	<i>hom</i> , upon, on, below.
<i>haie</i> , night.	<i> hom</i> , to lock, bar a door.
<i>haie</i> , to flee.	<i>  hom</i> , a large owl.
<i>haie</i> , too much.	<i>hom</i> , a lion.
<i>haie</i> , to swell.	<i>hom</i> , to help, support.
<i>haie</i> , to play on an instrument.	<i>hom</i> , sand.
<i>hail</i> , cold.	<i>hom</i> , carrots.
<i>haini</i> , little.	<i>hom chai</i> , small-pox.
<i>haini  kau</i> , misty, foggy.	<i>homa</i> , help.
<i>haini  kwa   koe</i> , eclipse of the moon.	<i>homathi</i> , a helper.
<i>haio</i> , a swelling, a tumour.	<i> ho</i> , hair.
<i>hani</i> , a cuckoo.	<i> ho</i> , to banish.
<i>hao</i> , to provide water for a journey.	<i>hoe</i> , evil.
<i> hao</i> , a buffalo.	<i> ho</i> , forest.
<i>ha uku pakela</i> , this morning.	<i>ho tsiri</i> , fun, mirth.
<i>haya</i> , sharp.	<i>hora</i> , over yonder.
<i>hee</i> , to make work.	<i>hore</i> , a vlei, marsh, pan.
<i>hee</i> , war.	<i>horehe</i> , to scratch.
<i> he yom</i> , to blow a fire with the mouth.	<i>horica</i> , to arrive.
<i>hethi</i> , a worker, a labourer.	<i> hou</i> , hail.
<i>hi</i> , a vulture.	<i>huakho</i> , permission.
<i>hiamia</i> , to serve.	<i>huhuma</i> , to make boil (S.).
	<i> hum</i> , breath, spirit.

VOCABULARY—*contd.*

<i>huo</i> , to approach.	<i>isa  kra</i> , a small spotted hyæna.
<i>huu</i> , to leave.	<i>itsam</i> , a spoon.
<i> huu</i> , the chest.	<i>iya</i> , to sink.
<i>huu</i> , a thing.	
<i> hwa</i> , to pour.	
<i> hwa</i> , to go down.	<i>jau kakho</i> , to fine.
<i> hwa kakho</i> , to complete.	<i>jem</i> , to fold.
<i>hwe</i> , to fear, be afraid of.	<i>jiba</i> , a lake or pool.
<i>hwe</i> , to polish, rub.	<i>jibi</i> , a digging stick.
<i>hwe</i> , a race, to leave.	<i>jiee</i> , sin.
<i>hweha</i> , pregnant.	<i>ji jiachw</i> , a partner.
<i>hwee</i> , to squeeze out pus.	<i>jiko</i> , pestle of a stamping block.
<i>hwee</i> , to be surprised.	<i>jim</i> , a locust.
<i>hwee</i> , fear.	<i>jinaa</i> , a well or fountain.
<i>hwee</i> , to escape, run, fly from.	<i>ji nyim</i> , a bean, pea.
<i>hwe lqua</i> , chalk, lime.	<i>jo</i> , to pick up.
<i>hwehe</i> , white.	<i>jo</i> , proud.
<i>hwehwe</i> , to outrun, be before.	<i>joa</i> , a staff, stick.
<i>hwe tha</i> , a roan antelope.	<i>joaa</i> , ashes, soap.
<i> hwehwe</i> , to become hot.	<i>jobee</i> , to surround.
<i> hwere</i> , the bowels.	<i>jobi</i> , a hare.
<i> hwere</i> , to pray.	<i>jobi tsau</i> , the tail of a hare.
<i>hwere</i> , a muddy pool.	<i>joe</i> , to take out fire.
<i>hwerehe</i> , to scratch.	<i>joko thome</i> , flying ants.
<i>hwethi</i> , a fugitive.	<i>jolu</i> , to plant.
<i>hwi</i> , good, well.	<i>jona</i> , a duck.
<i> hwi</i> , to entice.	<i>joo</i> , to overflow.
<i>hwi ka</i> , evening.	<i>joo</i> , to suspect.
<i>hwi kua</i> , about dark.	<i>joobe</i> , to walk round.
	<i>joree</i> , the bark of a tree.
	<i>joru</i> , the skin.
<i>i</i> , and.	<i>jou</i> , a sort.
<i>ia</i> , to tread on.	<i>ju</i> , a sheep.
<i>iaia</i> , to trample.	<i>ju</i> , a house, a nest.
<i>ibi</i> , an egg.	<i>ju</i> , darkness.
<i>ibura khoe</i> , to sit on eggs, incubate.	<i>juave</i> , a chalk pan.
<i>ichu</i> , to be like.	<i>jube</i> , an ox, cow.
<i>ie, iye</i> , another.	<i>jube chu</i> , cow dung.
<i>ie</i> , a mine, hole, pitfall.	<i>jube  kra</i> , a young ox.
<i>ihe</i> , together, all.	<i>jube  kha</i> , beef.
<i>ii</i> , and.	<i>jube n gai</i> , a cow (f.).
<i>isa</i> , a spotted hyæna.	

## I.

## VOCABULARY—contd.

<i>jubere kaie</i> , to inspan, yoke oxen.	<i>kaa</i> , to skin.
<i>jubere thowe</i> , a drove of oxen.	<i>kaa</i> , poor, to be poor.
<i>jue</i> , to disagree.	<i>kaa</i> , a peg.
<i>jui choo</i> , a skin bag, ox hide.	<i>kaae</i> , to chew up.
<i>ju ka ko  yhaie</i> , a maggot in a grass case.	<i>kaan</i> , to crawl.
<i>ju  kau</i> , a ram.	<i>kaao</i> , clearness, beauty.
<i>ju  khoa</i> , a sable antelope.	<i>kaase</i> , nicely, clearly.
<i>ju  kum tsikho</i> , a door.	<i>kaase</i> , quite, clearly.
<i>ju  kwa</i> , a lamb.	<i>kaba</i> , a tendon.
<i>ju nyimo</i> , the roof of a house.	<i>kaba</i> , a thread, reimpje.
<i>junye</i> , black, blackness.	<i>kaba</i> , hunger.
<i>jure</i> , a board, plank.	<i>kaba</i> , a branch, a twig.
<i>jure</i> , to herd cattle.	<i>kabaa</i> , a wing, a shoulder-blade.
<i>jurevo</i> , to exalt, cause to grow, follow.	<i>kabua</i> , a calabash, a bowl.
<i>jurethi</i> , a herd.	<i>kabao</i> , to curdle.
<i>jurihe</i> , to beware of.	<i>kabe</i> , to suck blood.
<i>juro</i> , afterwards.	<i>kabe</i> , notched.
<i>jurouwa</i> , behind.	<i>ka be</i> , unjust.
<i>jurunye</i> , red.	<i>kabe kakho</i> , to cause to turn aside.
<i>juu</i> , a bustard.	<i>kabo</i> , a sandal.
<i>juu</i> , a colour.	<i>kabo cho</i> , to put on a sandal.
<i>juu</i> , rushes.	<i>kabo chwaho</i> , to take off a sandal.
<i>jwan</i> , a club, knobkerrie.	<i>kaboo</i> , the spoor of an animal.
<i>jwe</i> , to contradict, to deny.	<i>ka cho</i> , kindness.
<i>jwene</i> , a baboon.	<i>kadi</i> , a scorpion.
<i>juenjice</i> , a kidney.	<i>kadu</i> , to applaud.
<i>juenjice 'yuwe</i> , fat of the kidney.	<i>kadu  kadu</i> , to pass each other.
<i>jweo</i> , an objection, a denial.	<i>kae</i> , to cook.

## K

<i>ka</i> , to eat.	<i>kae</i> , to bind, join, tie up, inspan.
<i>ka</i> , seeing that, with.	<i>kae</i> , to slaughter, to stab.
<i>ka</i> , to gush as a fountain.	<i>kae</i> , just.
<i>ka</i> , to deprive.	<i>kaee</i> , to scrape.
<i>ka</i> , oil of anything.	<i>kaeo</i> , the autumn.
<i>ka</i> , to find something under a bush.	<i>kae  goe</i> , the month of December.
<i>kaa</i> , to wash another.	<i>kae kakho</i> , to press.
<i>kaa</i> , a gemsbok's stomach.	<i>kae we</i> , to go empty.
<i>kaa</i> , the gizzard, crop.	<i>kaghām ju</i> , the bladder.
<i>kaa</i> , to want, to seek.	<i>kagho</i> , a knife.
<i>kaa</i> , to suck.	<i>kagho</i>   <i>ka</i> , a knife handle.
<i>kaa</i> , nice, clean, pretty.	<i>kaha</i> , to be satisfied.
	<i>kaahabe</i> , a black and white crow.
	<i>kahe</i> , to rest, to lean upon.

VOCABULARY—*contd.*

<i>kaho</i> , satisfaction, goodness.	<i>kakho</i> , a Bateleur eagle.
<i>kai</i> , to abuse.	<i>kakho</i> , to bind.
<i>kai chom</i> , to rejoice.	<i>kakhyo</i> , the body.
<i>kai churi</i> , long ago, of old.	<i>ka kwakho</i> , to hunt wild animals.
<i>kai chuwa</i> , to starve.	<i>kala</i> , the stoep of a house.
<i>kaide</i> , old.	<i>kala</i> , the heavens, the stars.
<i>kaie</i> , to get a fright.	<i>kam</i> , the sun.
<i>kaie</i> , to be agreeable nice, pretty.	<i>kam</i> , to whisper.
<i>kaie</i> , dancing.	<i>kam</i> , to travel, to go, to follow after.
<i>kaie</i> , to press.	<i>kam</i> , the beak, the mouth.
<i>kaie</i> , a fetter.	<i>kam</i> , a thorn.
<i>kaie</i> , to get rich.	<i>kam</i> , to breed, beget.
<i>kaie</i> , a place.	<i>kam</i> , a beetle.
<i>kaie</i> , a hammer.	<i>kam</i> , to knock, to strike.
<i>kaie</i> , a necklace.	<i>kam</i> , to come to an end.
<i>kaie kham</i> , a collar.	<i>kama</i> , a hartebeest.
<i>kaie   kai</i> , to tie together.	<i>kama</i> , a splinter.
<i>kaie nyaa</i> , wintry weather.	<i>kama</i> , to nurse.
<i>kaieo</i> , riches.	<i>kama</i> , to defend.
<i>kaie</i> , to learn.	<i>kama</i> , to (used with a verb of motion).
<i>kaie</i> , to put on a belt.	<i>kama</i> , a scavenging beetle.
<i>kaiko</i> , iron.	<i>kama</i> , to go to a distance.
<i>kaiho</i> , sweet.	<i>kamaa</i> , to follow after.
<i>kaii</i> , to yawn.	<i>kamacha</i> , to find.
<i>kaii</i> , a jaw.	<i>kamaha</i> , thirsty.
<i>kai ku</i> , to make fair, pretty, agreeable.	<i>ksamathi</i> , a defender.
<i>kai ku denehe</i> , to lick oneself.	<i>kam choao</i> , the south.
<i>kai   kai</i> , to mix.	<i>ksam  ge</i> , a wild animal.
<i>kaisi</i> , a klipspringer.	<i>ksam  gera</i> , a herd of wild game.
<i>kai tsau</i> , cold water.	<i>ksam  ge khoo</i> , a game pit.
<i>kaiya</i> , to be rich.	<i>ksamhe</i> , a bramble bush.
<i>kaiye</i> , to belch as a dog.	<i>kam ihe</i> , daily.
<i>kai yoku</i> , outside.	<i>kam   kowe</i> , to be wide.
<i>ka   ka</i> , to be full of leaves (as a pool of water).	<i>kam   ko kakho</i> , to widen.
<i>ka   ka</i> , to sift meal.	<i>kamnye</i> , two, both.
<i>ka   ka</i> , evidence in court.	<i>kamnye</i> , twice, two.
<i>ka kakho</i> , to withhold.	<i>kamo</i> , a defence.
<i>ka kau</i> , to raise up.	<i>kamo</i> , thirst.
<i>ka khai</i> , narrow.	<i>ksamov</i> , the inside of the mouth.
<i>ka khee</i> , to look around.	<i>kampi</i> , a bridge.
<i>ka khor</i> , to be bound.	<i>kam tsikho</i> , a mallet.
	<i>kam u</i> , often.

VOCABULARY—*contd.*

<i>kamwa chwa</i> , a lip.	<i>karii</i> , to be excited.
<i>tkam zo koza</i> , to gain.	<i>kari kakho</i> , to drive carefully.
<i>  kañ</i> , a wild water melon.	<i>karisi</i> , difficult, much.
<i>kan</i> , a sack.	<i>kari simo</i> , to attend.
<i>tkan</i> , to judge.	<i>kari siro</i> , to stand by, stick to.
<i>kana</i> , perhaps, either, as.	<i>kariu</i> , hope, to save.
<i>kanahé</i> , to make peace.	<i>karo</i> , a boy.
<i>kano</i> , ought.	<i>karo</i> , a large hail stone, a stone.
<i>ykano</i> , a watch.	<i>karu</i> , the stem of a leaf.
<i>kano</i> , a reim, rope.	<i>karu</i> , to strain.
<i>tkano</i> , a judgment.	<i>ka se chunoe</i> , to be safe.
<i>tkano</i> , a neck.	<i>ka se he</i> , to justify.
<i>tkanthi</i> , a judge.	<i>ka se ho</i> , to provide for.
<i>tkao</i> , an eland bull.	<i>ka se heyo</i> , better.
<i>tkao</i> , to pick.	<i> ka tsikho</i> , ointment, fat.
<i>tkao</i> , a trial.	<i>  kau</i> , a worm.
<i>kao</i> , justice.	<i>kau</i> , to disbelieve.
<i>ykao</i> , new.	<i>kau</i> , you (pl.).
<i>  kao</i> , bad, dirty.	<i>yau</i> , a skin cloak, blanket.
<i>ykao</i> , a splinter.	<i>yau</i> , a pocket, skin bag.
<i>ykao chunwa</i> , against.	<i>tkau</i> , an olive tree.
<i>tkao  gna</i> , a young man.	<i>kau</i> , to remain.
<i>kao kho</i> , to befall.	<i>  kau</i> , to chop, cut.
<i>kaone</i> , better.	<i>tkau</i> , to roar as a fire.
<i>kaoo</i> , to throw down.	<i>tkau</i> , to prance.
<i>kaoo</i> , the open country.	<i>  kau</i> , to canter.
<i>  kara</i> , to scatter, to run away.	<i>kau cho</i> , a man, a person.
<i>karaa</i> , a rhebok.	<i>  kau kakho</i> , to make peace, reconcile.
<i>karaa</i> , a cattle post, a kraal.	<i>  kau   kau</i> , to prepare, make straight.
<i>  karaisi</i> , a shadow.	<i>  kau   kau tsighwa</i> , a preparation.
<i>  kara   kara</i> , to scatter about.	<i>kau ke juwa ye</i> , to long for.
<i>kara mahe</i> , to choose.	<i>  kau</i> , a lizard.
<i>  karano</i> , a flock of sheep.	<i>  kau</i> , a chopper, a hatchet.
<i>kare</i> , a little.	<i>kau se konya</i> , to stick oneself up.
<i>kare</i> , to cut up meat to dry.	<i>  kau tathe</i> , upright.
<i>karee</i> , toes, claws, heels, hoofs.	<i>keba cha karee</i> , the paw of an animal.
<i>karee</i> , the spoor made by the feet, etc.	<i>ke be ka</i> , except.
<i>  kareha</i> , to turn oneself.	<i>  kee</i> , to ery, cackle, low.
<i>kari cho</i> , a brave man, pride.	<i>  kee</i> , to stick to.
<i>karie</i> , thick, strong.	<i>  kee</i> , a gun, a blue wildebeest.
<i>kariepe</i> , soft.	<i>  kee</i> , hot.
<i>karii</i> , the trunk of a tree.	<i>  kee</i> , to command.

VOCABULARY—*contd.*

<i>kee</i> , to forgive.	<i>khaie</i> , a springbuck.
<i>ke kakho</i> , to play on an instrument.	<i>khaie</i> , a string of beads.
<i>keke</i> , to hoax.	<i>khaie</i> , to shine.
<i>kelee</i> , although.	<i>khaie</i> , music.
<i>keñ keñ</i> , to shake.	<i>khaie</i> , new.
<i>keoo</i> , a cry.	<i>khaie</i> , the body.
<i>keo</i> , an oven.	<i>khaie ka</i> , night.
<i>kere</i> , you (emphatic, sing.).	<i>khaii</i> , to please.
<i>kesi</i> , a box (S.).	<i>khai khai</i> , to provoke.
<i>kha</i> , a master.	<i>khaine</i> , a star.
<i>kha</i> , to set a trap.	<i>khaine yao</i> , darkness.
<i>kha</i> , to beware.	<i>khainye</i> , frost, coldness.
<i>  kha</i> , a gateway.	<i>khai</i> , to meet with.
<i>kha</i> , to be accustomed to.	<i>khaiwa</i> , between.
<i>kha</i> , to rub in medicine or fat.	<i>khaiya</i> , to be angry with.
<i>kha</i> , to swim.	<i>khaiyo</i> , anger.
<i>khaa</i> , to shine.	<i>khukathi</i> , a witness.
<i>khau</i> , to be perplexed, astonished.	<i>khakho</i> , a drink.
<i>khau</i> , red clay, for smearing the body.	<i>khakho</i> , to pour out from.
<i>khau</i> , to try.	<i>kha   hai</i> , to join.
<i>khau</i> , to put a pillow under the head.	<i>kham</i> , the mouth.
<i>khau</i> , to be right, good.	<i>khamb</i> , to sparkle.
<i>khau</i> , a neighbour.	<i>kham</i> , a lion.
<i>khau</i> , the paunch of an animal.	<i>kham</i> , urine.
<i>khau</i> , to drink.	<i>kham</i> , possessive particle after a pro-noun.
<i>khaba</i> , coals, charcoal.	<i>kham</i> , to clap hands.
<i>khaba</i> , to form a habit.	<i>khamb</i> , to bruise.
<i>khabao</i> , a habit.	<i>khama</i> , the chin.
<i>khabo</i> , a small yellow monkey.	<i>khan</i> , to swear.
<i>kha chu</i> , to sprinkle.	<i>khana</i> , to plunder.
<i>kha</i>   <i>yot</i> , an inaccessible mountain.	<i>khana ho</i> , to bleed.
<i>khadii</i> , to slip.	<i>khane</i> , a yellow hawk.
<i>khae</i> , great.	<i>khano</i> , a red meerkat.
<i>khaeyo</i> , a laugh.	<i>khao</i> , a cheetah.
<i>khaha</i> , to anoint with grease.	<i>khao</i> , an assegai, javelin, lance.
<i>khaho</i> , to wash clothes.	<i>khao</i> , to look at.
<i>khaho roma</i> , to wash clothes for another.	<i>khao</i> , clear, dazzling, shining.
<i>khai</i> , to be angry with.	<i>khari</i> , a vein.
<i>khai</i> , cloth (S.).	<i>khariye</i> , narrow.
<i>khai a cho</i> , a conqueror.	<i>khao tsikho</i> , a drinking vessel.
<i>khai</i> , a poisonous berry.	<i>khau</i> , a boundary.

VOCABULARY—*contd.*

‡ <i>khan</i> , large, long.	<i>khom kakho</i> , to make quiet.
<i>khan</i> , lightning.	<i>khom ke</i> , uncircumcised.
<i>khan cho</i> , a villain, villainy.	<i>khomoo</i> , to cut off.
<i>khan na</i> , witchcraft, a charm.	<i>khon</i> , to grind.
<i>khan na kauthi</i> , a witch.	‡ <i>khono</i> , down, below, under.
<i>khauice</i> , sour.	<i>khonien</i> , on the ground, below.
<i>khethi</i> , a secretary.	<i>khoe</i> , to catch an ox.
<i>khi</i> , a tune, to play.	<i>khoo</i> , evil.
<i>khii</i> , a long-horned rhinoceros.	<i>khoo</i> , to fix.
<i>khio</i> , a dance.	<i>khoo</i> , to gather, take by force.
<i>kho</i> , to go, to come from.	<i>khoo</i> , mud, dirt.
<i>khoo</i> , a tooth.	<i>khoo</i> , dry grass, a bush.
<i>khoo</i> , to gather, to collect.	<i>khoo</i> , large.
<i>khoo</i> , most.	‡ <i>khoo</i> , age.
<i>kho</i> , the springtime.	<i>khoo</i> , to go away, to travel.
<i>kho</i> , a gemsbok.	<i>khoo</i> , good.
<i>khona</i> , to come back.	<i>khoo</i> , giddiness.
<i>khoa</i> , a duiker.	<i>khope</i> , a bachelor (S.).
<i>khoa</i> , unripe.	<i>khora</i> , to inflate.
<i>khao nyimo</i> , a mountain top.	<i>khora</i> , to spread out.
<i>khobe</i> , a spider.	<i>khora</i> , to be spread out.
<i>khoboi</i> , soft.	<i>khore</i> , the paunch, the stomach.
<i>khoro choro</i> , a double kaross.	<i>khori</i> , the stump of a tree.
‡ <i>khoo chu</i> , a council.	<i>khou</i> , bone dice.
<i>khoo chuu</i> , to make an agreement with.	<i>khou</i> , a veil, to veil.
<i>khodi</i> , a wild bean.	<i>khove</i> , male.
<i>khoe</i> , a pitfall for game.	‡ <i>khove</i> , great.
<i>khoo ha hii</i> , a dead tree.	<i>khu</i> , the loins.
<i>khohoe</i> , to assemble.	<i>khobi</i> , to flower.
‡ <i>khoho</i> , an antelope.	‡ <i>khui</i> , to cough.
<i>khoho</i> , a clay pot.	<i>khu khom</i> , an owl.
<i>khoo kudi</i> , short.	<i>kuu khui</i> , to wait for.
<i>kho   kae</i> , to put side by side.	‡ <i>khua</i> a white man, Boer, European.
<i>kho kho   kwai</i> , a stamping pestle.	<i>khun ka</i> , under.
<i>kho  khoo</i> , to make warm.	<i>khuri</i> , a grain of seed.
<i>khole</i> , the claw of a wild animal, nail.	<i>kuu</i> , to put on the head, to carry.
<i>khom</i> , a spider.	‡ <i>kuu</i> , the face, forehead.
<i>khom</i> , a country.	<i>khwa</i> , to return.
<i>khom</i> , a salutation.	<i>khwa kwa   gaiho</i> , the knuckle joint.
<i>khom</i> , to bite, divide, break off.	<i>khwa kakho</i> , to govern, to rule.
<i>khom</i> , an owl, night hawk.	<i>khwa kakho</i> , to cause to return.
<i>khom gee</i> , a circumcision ceremony.	<i>khwe</i> , to avoid.

VOCABULARY—*contd.*

<i>khweai</i> , to decoy, tempt, beware.	<i>kome</i> , to be increased.
<i>khwee</i> , to vomit.	<i>komhe</i> , to break a string.
<i>khwee</i> , to hatch.	<i>komi</i> , to swoon.
<i>khicii</i> , to terrify.	<i>kom kakho</i> , to swear.
<i>kie</i> , to cook.	<i>kom    kom</i> , to dash in pieces.
<i>kii</i> , a grave.	<i>komnye</i> , short.
<i>kii</i> , to compel.	<i>kom tsikho</i> , the lid of a box.
<i>kii</i> , an assembly.	<i>konahe</i> , to be able.
<i>ki ki kakho</i> , poison for an arrow.	<i>koni</i> , the side, part of a thing.
<i>kipi</i> , a stone for a digging stick.	<i>konyia</i> , blindness.
<i>ko</i> , to dry, wither, melt.	<i>koni nyim</i> , to whistle.
<i>kobaa</i> , to sharpen.	<i>kono</i> , to ferment.
<i>kobe</i> , to lean upon.	<i>koo</i> , large, big.
<i>koboo</i> , a partridge.	<i>koo</i> , to receive with the hands.
<i>kobose</i> , to take it easy, to rest.	<i>koo</i> , dryness.
<i>kodee</i> , a pattern.	<i>koo</i> , the end.
<i>kodi</i> , a veld potato.	<i>koo</i> , to surround.
<i>koe</i> , to sleep.	<i>koo</i> , to get up, to force a way through.
<i>koe</i> , a bowl.	<i>koo</i> , an army.
<i>koeta</i> , to drive.	<i>koo</i> , to exhaust.
<i>koha</i> , a zebra.	<i>pkoo</i> , to send away.
<i>koha   kee</i> , the Sansokwe Bushmen.	<i>koo kakho</i> , to finish a thing.
<i>kohe</i> , to meet together.	<i>kooye</i> , a burrow.
<i>koho</i> , meat, flesh.	<i>ko pao</i> , a Namaqua dove.
<i>kooho</i> , width.	<i>kopi</i> , a basin.
<i>koho</i> , to faint.	<i>kora</i> , native beer.
<i>koii</i> , a pace.	<i>koraha</i> , to be finished.
<i>ko kakho</i> , to serve.	<i>koraku khowe</i> , to be drunk.
<i>koko poo</i> , a cock (S.).	<i>korana</i> , dead, deformed.
<i>kola</i> , to write.	<i>korana cho</i> , a corpse.
<i>kola kola</i> , a white-necked crow.	<i>koreha</i> , fatigue.
<i>kolathi</i> , a writer.	<i>koro</i> , a cliff, a precipice, krantz.
<i>kololo</i> , to be too large.	<i>koro</i> , to bray.
<i>kolobe</i> , a pig (S.).	<i>koro</i> , a hole in a tree.
<i>kom</i> , a cloud.	<i>koruka</i> , to command.
<i>kom</i> , to curl the hair.	<i>kowe</i> , to cut.
<i>kom</i> , to increase.	<i>kowe</i> , thick.
<i>kom</i> , to stamp.	<i>kwene</i> , a month, the moon.
<i>kom</i> , soot.	<i>kwene kwa tsa</i> , to be moonlight.
<i>kom</i> , the navel.	<i>koyi</i> , a pole.
<i>koma</i> , to borrow.	<i>ku</i> , near.
<i>koma</i> , a bowstring, bow.	<i>ku</i> , a raven.

## VOCABULARY—contd.

ku, laziness.	kweaha, to be alive.
kuao, a millipede, centipede.	kwebu, greyness, blue (S.).
kubu, a hippopotamus (S.).	kwede, to pretend.
ku ka khoe, to recline.	kwee, a bull frog.
ku  kwa, a dunghill.	kwee, the dry season.
kukuru, a knee.	kwewha, to be full.
kukuru   khaihwa, a knee joint.	kuehe, to be anxious.
kum, to shut.	kueho, to abase, to blame.
kun, a name.	ikwe kakho, to make tired.
kun chi, to name.	kwe  kwa, a brook.
kunuwa, below.	kwe  kwe, to fill.
kuree, an offering.	kwe kwe, a Saviour.
kurihe, bluntness.	kwe  kueho, a river flood.
kuriii, an assembly.	kwene ju, a Mochuana hut.
kuru, a wild cat.	kweo, life.
kuruho, high fever.	kweeo, the pelvis.
kuruu, fever, a shivering fit.	kueri, to curse.
kuta, the den of a wild beast, a form.	kwen zera, a coot, waterhen.
kuthi, in sight of, in presence of.	kwi, to shoot.
kuti, a daughter.	kwi, to speak to, have a chat with.
kutlwana, a threshing stick (S.).	kwi, to tell to, acquaint.
kuu, a kilt.	kwia, to live.
kuu, a poort, pass.	kwi chu, to condemn, to dispute.
kuu, a family.	kwidza, kwiza, to rebuke, speak to.
ku yea, to turn one's back.	kwii, to pierce, to bore.
kwea, to strike, to beat.	kwii, to kick.
kwa, a rat.	kwii, a bull, the male of anything.
kwa, to say.	kwii, a faction.
kwa chaa, to be able.	kwi kwya kwere kwere, worship.
kwa chombe, to be deaf.	kwio, language, speech, tale.
Ikwa   ga, the forehead.	kwiye, to be enough.
kwa  gwa, a baby.	kwiye, once only, enough.
kwahama, a horse's head.	kwiyohwu, together.
kwaho, to take down, to dismount.	kwiza, to rebuke, to reproach.
kwa kola cho, a writer, a scribe.	kyoo, the courtyard of a chief.
kwa kwi be cho, a dumb person.	
kwa tsikho, lameness.	
Ikwayo, to be sleepy, tired.	L.
Ikwe, to sleep.	lamba, a cockle.
kwe, to skip about.	lebadj, a cicatrix, a tribal mark.
kwe, a river.	lebaka, time (S.).
kwe, to be crowded.	lebala, a plain (S.).
	lebanjee, a belt.

VOCABULARY—*contd.*

<i>lebate</i> , a table (S.).	<i>mena</i> , indeed.	
<i>lebebe</i> , buttermilk (S.).	<i>mene</i> , a wild pig.	
<i>lebole</i> , to pardon, be kind to.	<i>mikela</i> , a severe cold, influenza.	
<i>lebolee</i> , kindness, pardon.	<i>mitwa</i>    <i>gam</i> , a finger ring.	
<i>lehuma</i> , dearth, want (S.).	<i>mima</i> , stubborn.	
<i>lekaba</i> , a pack ox (S.).	<i>mo</i> , to discover.	
<i>leko tsana</i> , a brick wall.	<i>moa</i> , on purpose.	
<i>lenyebi</i> , a badger (S.).	<i>mo</i>    <i>hwe</i> , to smell.	
<i>lepai</i> , a cotton blanket (S.).	<i>modubu</i> , a willow tree.	
<i>letopo</i> , the comb of a cock.	<i>modumo</i> <i>hee</i> , to make a noise (S.).	
<i>letse</i> , braided hair.	<i>moe</i> , to be visible.	
M.		
<i>ma</i> , to find.	<i>molata</i> <i>ona</i> , to owe (S.).	
<i>maa</i> , to lend, to give to, to forgive.	<i>moñam</i> , to take heed to.	
<i>mabashole</i> , a nettle (S.).	<i>moo</i> , to see, appear, sight.	
<i>mabibi</i> , cream (S.).	<i>moowa</i> , very much.	
<i>madi</i> , money (S.).	<i>moroba</i> , a young girl (S.).	
<i>madi teo</i> , to give money (S.).	<i>moro</i> <i>ha</i> , salad (S.).	
<i>mae</i> , mother (S.).	<i>moruku</i> , a fence (S.).	
<i>maferefera</i> , a rogue, a rascal (S.).	<i>moswa</i> , a white ant (S.).	
<i>mahata</i> , to be bald.	<i>mothape</i> , cattle.	
<i>mahuto</i> , a knot.	<i>muba</i> , bellows (S.).	
<i>makhopho</i> , the forehead of a baboon.	<i>mudi</i> , maize, mealies.	
<i>makhwarapano</i> , a pebble (S.).	N.	
<i>makoe</i> , a francolin.	<i>nachuri</i> , last year.	
<i>makwa</i> <i>bupi</i> , flour (S.).	<i>nakedi</i> , a wild cat (S.).	
<i>makwu thara</i> , a headache (S.).	<i>nam</i> , where.	
<i>makwai kwana</i> , a quail.	<i>nama</i> , who.	
<i>mala</i> , cold (S.).	<i>nama</i> <i>cho</i> ? which man ?	
<i>malamba</i> , a thick worm.	<i>nama</i> <i>na</i> <i>cho</i> ? of what country ?	
<i>mamanthwane</i> , a bat (S.).	<i>nama</i>    <i>kwa</i> , a bracelet (leather).	
<i>mamphorwana</i> , a chicken (S.).	<i>num</i>    <i>ka</i> , when.	
<i>mano</i> , a device, a plan.	<i>nun</i>    <i>hoo</i> , hair.	
<i>maphutse</i> , a pumpkin.	<i>nau</i> , what,	
<i>mara</i> , my mother (S.).	<i>nare</i> ? who ?	
<i>mashe</i> , my mother.	<i>nate</i> , what.	
<i>mataushi</i> , a pole (S.).	<i>natha</i> , how.	
<i>matha</i> , to gallop.	<i>nau</i> , yesterday, the other day.	
<i>maza</i> , pl. of <i>mara</i> , my mother.	<i>nawa</i> , a noise.	
<i>me</i> , to say to.	<i>ndala</i> , a grinding stone, a flat rock.	
<i>mehe</i> , to say to oneself.	<i>ndo</i> <i>cha</i> <i>cho</i> , immense.	
	<i>ndodja</i> , a hump.	

VOCABULARY—*contd.*

<i>ndivedi</i> , a ball, round thing.	<i>no gaiewa</i> , a wilderness, desert.
<i>nemeru</i> , signs of birth.	<i>noha</i> , this year.
<i>ñ gaa</i> , a horn.	<i>no ika</i> , an eddy of wind and dust.
<i>n gaa</i> , a jackal.	<i>noi yela</i> , everywhere.
<i>ngaa</i> , to burn a candle.	<i>nokhan</i> , to run away.
<i>ñ gai</i> , to burn.	<i>noo</i> , the world, earth, the veld.
<i>ñ gaié</i> , to swing.	<i>nouu</i> , to-day.
<i>ngainingai</i> , an anthheap.	<i>ñuchu a tsessebe</i> , antelope.
<i>ngaka</i> , a doctor (S.).	<i>nya</i> , before.
<i>n gumi</i> , a springhaas.	<i>nyaa</i> , the wind, a storm.
<i>ñ guñ</i> , a debate, a discussion.	<i>nyaho</i> , to place.
<i>ngantse</i> , to argue.	<i>nyañ</i> , to accuse.
<i>ngaro</i> , a water iguana.	<i>nyaoka</i> , to go on.
<i>ngatha</i> , a heap.	<i>nyuoko</i> , perseverance.
<i>ngano</i> , to surround.	<i>nyntsa</i> , to rebel (S.).
<i>ñguwo</i> , an example.	<i>nye cha</i> , to be greedy.
<i>ngau</i> , the firmament.	<i>nye chu</i> , to be stingy.
<i>n gonane</i> , an earring.	<i>nyee</i> , to put out a fire.
<i>n ghau</i> , perspiration.	<i>nyehe</i> , to hear.
<i>n ghawaha</i> , to perspire.	<i>nyeñ</i> , to remember, consider.
<i>n ghuru</i> , to forget.	<i>nyenne</i> , to spin.
<i>n gini  ku</i> , to fan oneself.	<i>nyim</i> , to make.
<i>ngololo</i> , a red breasted lizard.	<i>nyim</i> , to spread out, as roots.
<i>ngom</i> , the anus.	<i>nyim he</i> , to coil.
<i>ñgomá</i> , to kiss.	<i>nyim khao</i> , to look up.
<i>ngonawe</i> , three.	<i>nyimo</i> , above, the top, high.
<i>ñgoó</i> , wool.	<i>nyimo</i> , condition, state of a thing.
<i>ngotake</i> , to humble oneself.	<i>nyim oku</i> , the sky, heaven.
<i>ngu</i> , a smell.	<i>nyimwa</i> , upon, on top of.
<i>ñgucho</i> , a tsessebe antelope.	<i>nyimwa   koe</i> , to touch.
<i>n gwa</i> , a bone.	<i>nyin</i> , to think.
<i>n gwa   kware</i> , a rocky place.	<i>nyinhe kakho</i> , to admire, exalt.
<i>n gue</i> , a large bustard.	<i>nyin kakho</i> , counsel.
<i>ni</i> , and.	<i>nyin ne</i> , to hope.
<i>n kua</i> , a wait-a-bit thorn.	<i>nyin ne</i> , to plait.
<i>ñ kachu</i> , a battle.	<i>nyo</i> , to sit.
<i>n kaha</i> , to sit by the side of.	<i>nyoahé</i> , to be glad.
<i>ñ kareha</i> , to forgive one another.	<i>nyo chakho</i> , to do nothing.
<i>ñ khai</i> , to shoot.	<i>nyo hiva</i> , pasturage.
<i>n khare</i> , others.	<i>nyo nehe</i> , to do without food.
<i>ñ koo</i> , a chief's courtyard.	<i>nyono</i> , an accusation.
<i>no churi</i> , this year.	<i>nyono mee</i> , to tell lies.

VOCABULARY—*contd.**nyoo*, a chair, a stool.*nyoo*, to eat grass, to graze.*nyoo*, food, meat.*nyoo*, to sit down to food, to eat.*nyo tee*, to give food to.*nyuno*, bread, porridge.

## O.

*oaa*, just so.*oa khwa*, at.*oe*, deep, depth.*oha khoo*, a dead body.*ohé*, dead.*oka*, down, below.*oo*, death, to die.*oo*, to hunt.*oroive*, laziness.*osa*, to miss.*oso*, a miss.*otuwe*, colic, pain in the stomach.*owa*, within, inside.*owa ||khaoo*, to look down, to look inside.*owa |khaiho*, to fall down, to fall inside.*owe*, to burst.

## P.

*paa*, a bundle.*paa*, a treeless plain.*pa-kela*, dawn, daybreak.*pana*, a cup (S.).*pando*, an adze (S.).*pango*, a rafter.*papasi*, a root, a branch.*pata*, to please.*pataa*, firm, solid.*pataha*, a walking-stick.*patha*, a crack.*patoi*, sweet.*paica*, a lump of wet clay.*pee*, to gush, jump out, to hop.*pela*, a rock rabbit.*pelo*, a broom (S.).*peo*, seed (S.).*pha*, to bite.*phetolo*, an answer (S.).*phuru*, a hole in a blanket.*pii*, to suck, to nurse, milk.*piaho*, to give suck.*pidi*, a goat (S.).*poo*, a bull, male of anything.*pudi*, a goat (S.).*pudi tsene |kho*, goatherd.*pudumo |genee*, a mason bee.

## R.

*rue*, to leave.*ricerwe*, a lapwing, plover.

## S.

*sa*, to rest.*saa*, rest.*sako*, a reed, a rush.*saka |gana*, a leaf of a reed.*sako*, a mealie cob.*salabu*, a watermelon.*sam̄*, the breast, bosom, the teat, udder.*samong*, the fist.*sana*, to be rested, convalescent.*santhokwe*, a gall.*sasa*, to cure.*sasae*, to be cured.*sau oka*, the winter time.*se*, to accept, to take.*sebeo*, a funeral.*sedibo*, a patch.*see*, to marry.*see cho*, a bride.*seghudu*, a wild duck (S.).*sehai*, a smell of burning.*seho*, a blessing.*sehahu*, blind (S.).*sehoka*, by accident.*sehopa*, biltong (S.).*sehule*, a cripple.

VOCABULARY—*contd.*

<i>sekaba</i> , the tail of a jackal.	<i>sokela</i> , to follow up scent, as a dog.
<i>sekee</i> , river sand.	<i>sola tsikho</i> , a towel.
<i>sekisuhé</i> , to make peace (S.).	<i>solokolije</i> , a large black hare.
<i>sekware bana</i> , a rash (S.).	<i>sorothro</i> , a fork (S.)
<i>selara</i> , a trap for game.	<i>sosn</i> , a rain, a shower.
<i>selotili</i> , a lock, a bar (S.).	
<i>sena</i> , the hole of a spring hare.	T.
<i>senkuku</i> , a gizzard (S.).	<i>taa</i> , to work for.
<i>seo</i> , a marriage.	<i>taa</i> , to choke.
<i>sepere</i> , a horse (S.).	<i>taa kue</i> , redness, red.
<i>sepere  kwa</i> , a foal.	<i>tadi</i> , lightning (S.).
<i>serame e haie</i> , ice (S.).	<i>tagha</i> , to make drunk.
<i>seree</i> , a journey.	<i>tañ</i> , to get up early.
<i>serethé</i> , the back part of a hoof.	<i> tao</i> , an arrow.
<i>setena</i> , a brick.	<i>taulo</i> , a command (S.).
<i>sethaa</i> , yellow.	<i>tari</i> , flat.
<i>setswa kha</i> , to be idle.	<i>tauo</i> , to be better.
<i>setunya</i> , a daisy, a blossom (S.).	<i>tauwe</i> , to lick.
<i>shibiri</i> , a water tortoise.	<i> te kam</i> , gunpowder.
<i>shishi</i> , a poisonous black ant.	<i>tee</i> , the thigh, hind leg of an animal.
<i>sho</i> , dislike.	<i>tee</i> , to drive away.
<i>shodi</i> , snuff, tobacco.	<i> tee</i> , fire, firewood.
<i>shodi</i> , a large hawk.	<i> tee cha</i> , to make a fire.
<i>shom</i> , a shade.	<i> tee chu</i> , to gather firewood.
<i>shom</i> , to itch.	<i> tee gom</i> , to light a fire.
<i>shoo</i> , to desert, to forsake.	<i> tee nyoo</i> , a fireplace, a hearth.
<i>shoo</i> , the lungs.	<i>teme</i> , in a little while.
<i>shoo</i> , jealousy.	<i>tenane</i> , a stick.
<i>shoro</i> , a tree iguana.	<i>tenee</i> , by and by.
<i>sho tse</i> , to dream.	<i>tenee</i> , to swing anything.
<i>sho tsi</i> , a dream.	<i>tenee kakho</i> , to swing about.
<i>sho tsithi</i> , a dreamer.	<i>teo</i> , a marriage ceremony.
<i>shui</i> , to lift.	<i>teo</i> , to cease.
<i>shuri</i> , snuff, tobacco.	<i>tha</i> , to carve, to cut.
<i>shuru</i> , meal.	<i>tha</i> , to drink.
<i>shwa</i> , to itch, to irritate.	<i>thaae</i> , to split, to divide.
<i>shwae</i> , to suspect.	<i>thadho</i> , a piece.
<i>shwao</i> , itch, irritation.	<i>thagho</i> , a sparrow (S.).
<i>simesime</i> , ants (collective term).	<i>thaka</i> , blood.
<i>simesime  gaielo</i> , the queen of ants.	<i>thaka  ghadi</i> , a blister of blood.
<i>simolola</i> , to begin (S.).	<i>thaka ha</i> , dysentery.
<i>sipatoo</i> , an excuse (S.).	<i>thaka  kwa</i> , a drop of blood.

## VOCABULARY—contd.

<i>thaka kuu cha kuu jua</i> , bleeding at the nose.	<i>thoo chom kakho</i> , to hurt, to oppress.
<i>thaka lesikaa</i> , an artery (S.).	<i>thoo chom oo</i> , distress, sorrow.
<i>thame</i> , a secretary bird.	<i>Thora</i> , God, spirit.
<i>than</i> , to stand up, to wake up.	<i>thoro</i> , a hat (S.).
<i>than</i> , nettlerash.	<i>thoro anee</i> , to put on a hat.
<i>thana</i> , to sprout, to bloom.	<i>thoro cheeho</i> , to take off a hat.
<i>thana</i> , a berry.	<i>thotha</i> , to honour.
<i>thanaha</i> , standing up.	<i>thotsera</i> , a stone in a fruit, a pip.
<i>thanukho</i> , to cause to rise up.	<i>thoue</i> , a sore, a boil.
<i>thanao</i> , a sprout, bloom, flower, fruit.	<i>thuba</i> , a kilt.
<i>thañ kakho</i> , to cause to stand.	<i>thukaa</i> , yesterday.
<i>thanta bure</i> , a butterfly.	<i>thy [koo]</i> , the rainbow.
<i>thao</i> , to teach.	<i>thuru</i> , a rat, a mouse.
<i>thaothi</i> , a teacher.	<i>thusa</i> , to keep.
<i>thapi</i> , a fish (S.).	<i>thu zera</i> , a swallow.
<i>thara</i> , to tear, to crack.	<i>[tie]</i> , white, whiteness.
<i>thara</i> , a grain bin.	<i>tiro</i> , work (S.).
<i>tharanya</i> , to become torn.	<i>[toga]</i> , a drunkard.
<i>thari</i> , to bruise.	<i>tokwa</i> , brown (S.).
<i>thathi</i> , a carpenter.	<i>[tomo]</i> , the voice.
<i>thau</i> , to startle.	<i>tona</i> , to beg, to ask for.
<i>thauo</i> , to put in posts or poles.	<i>tonaa</i> , a request.
<i>thauo</i> , a decree.	<i>tonathi</i> , a beggar.
<i>thau thau</i> , to disappoint.	<i>tonee</i> , to pinch.
<i>the</i> , to stand.	<i>tongo</i> , the shoulder.
<i>thee</i> , to give.	<i>[too]</i> , to surprise.
<i>thee chu</i> , to give food to another.	<i>[too]</i> , always, only.
<i>theo</i> , a gift.	<i>[tousele]</i> , to touch.
<i>thibedela kwa hohua</i> , a camp.	<i>tsa</i> , gravy, fat, soup.
<i>thii</i> , to, with.	<i>tsa</i> , to warm oneself.
<i>thoa</i> , whey (S.).	<i>tsaa</i> , to steal, to rob, to plunder.
<i>thoe</i> , to depart.	<i>tsaa</i> , hot.
<i>thoeha</i> , to stay a day.	<i>tsaa</i> , water.
<i>thom</i> , to swallow, to eat up.	<i>tsaa</i> , to leap, bubble up, boil.
<i>thome</i> , to swallow up.	<i>tsaa</i> , to wring out of water.
<i>thon</i> , a hedgehog.	<i>tsaa go</i> , to wade in water.
<i>thoo</i> , to be sorry for.	<i>tsaa debe</i> , a salt pan.
<i>thoo</i> , always.	<i>tsaa Redi</i> , rubbish swept down by a flood.
<i>thoo</i> , mercy, pain, repentance.	<i>tsaa kwaho</i> , a fountain, a cascade.
<i>thoo bakwa</i> , on account of.	<i>tsaa nakasi koo</i> , to make haste.
<i>thoo chom</i> , to feel sorry for.	<i>tsaa ona behwa</i> , a waterless desert.

VOCABULARY—*contd.*

- tsaa wa* |gai, to plunge in water.  
*tsagho*, to roast.  
*tsa hai*, a sparrow.  
*tsa hai*, to scorch.  
*tsa haie*, to be scorched.  
*tsa haie*, wild.  
*tsaho*, to dig.  
*tsakho*, to cook, to roast, to bake.  
*tsamba*, a black and white cat.  
*tsama*, a wild melon.  
*tsamo*, a stick.  
*tsao*, to milk.  
*tsae*, many.  
*tsao chware*, a crowd, a company.  
*tsaowe*, to be milked.  
*tsara*, swift.  
*tsarna*, easy.  
*tsaraka*, quickly.  
*tsaraka dhan*, to be in a rage.  
*tsarao*, light, quick, fast.  
*tsarusi kahe*, to be in a hurry.  
*tsaru*, to choke, to suffocate.  
*tsarue*, to lie down, as cattle.  
*tsathi*, a rubber, a thief.  
*tsatsia*, to disappear.  
*tsau*, to become fat.  
*tsau*, the hand, finger, tail, arm.  
*tsau kakho*, to embrace.  
*tsau khuen*, to clap hands.  
*tsau ||kono*, to wag the tail.  
*tsauo*, the palm of the hand.  
*tsauo*, the tail of anything.  
*tsau tsau*, to become fat.  
*tsaye*, a ditch, a channel.  
*tse*, to send.  
*tsee*, to leak.  
*tsee*, to take.  
*tsee*, to command.  
*tselho me*, truly.  
*tsene*, flame, smoke.  
*tsene |kieu*, a beard.  
*tsene kwa nga*, to send up a smoke.  
*tsere*, to put out a fire.  
*tsere*, the mane of a lion.  
*tseriatha*, to dry up.  
*tsetse*, a sieve.  
*tsham*, to stoop, as approaching game.  
*tshao*, to insult.  
*tshi*, to coax.  
*tsi*, the hinder parts.  
*tsia tsikha*, to abolish.  
*tsiaa*, to need.  
*tsianoa*, to be wanting, to be sad.  
*tsie*, to drop, as rain.  
*tsii*, to grow, to sprout.  
*tsikaa*, a sword, a battleaxe.  
*tsio*, old age.  
*tsipi*, a bell, iron (S.).  
*tsiri*, to play.  
*tsiri tsikho*, merriment.  
*tsitsi*, a feeding place.  
*tsitsi*, to enlarge, exalt.  
*tsoko*, a muddy pool.  
*tsoko*, porridge, corn.  
*tsokonyoo*, porridge, corn.  
*tsonoo*, to twist.  
*tsonoya*, twisted.  
*tsoo*, to refuse.  
*tsupa*, a weevil.  
*tsure*, goods.  
*tsua*, to come out (S.).  
*tsunkho*, to be dug out, to pull out.  
*tsuwe*, a hornet.  
*tu*, rain.  
*tuba*, an apron.  
*tu marothodi*, a drop of rain (S.).  
*turn*, a quiver.  
*twe*, to remove one's residence.  
*tie*, to dip.  
*twee*, to spread out, as roots.  
*teeho*, to be pure.  
*tuenye*, fine, pretty.  
*twi*, a chasm.

VOCABULARY—*contd.*

<i>twi khwan goo</i> , to be side by side.	<i>ye</i> , yes (S.).	
<i>twi kwa</i> , impersonal pronoun (it).	<i>ye</i> , a pit, a hole in the ground. <i>ye</i> , are they, referring to things.	
U.		
<i>uba</i> , to hit.	<i>yechu</i> , to be like. <i>yena</i> , so that.	
<i>ucharo</i> , a Mokabe bush.	<i>yenaa</i> , a deep hole, a pit.	
<i>ue</i> , a red wild cat.	<i>yeachwa</i> , to be unlike.	
<i>uhe</i> , to take oneself off.	<i>yeowa</i> , to tell.	
<i>uka</i> , to-morrow.	<i>yera</i> , to burrow.	
<i>uka thañ</i> , to awaken.	<i>yeraka</i> , according to.	
<i>ukho</i> , a burden.	<i>yibi</i> , an axe, a hatchet.	
<i>uo</i> , the dawn, daybreak.	<i>yibi kwa</i> , a hammer.	
<i>upa kela</i> , early.	<i>yie</i> , entirely.	
<i>un</i> , to take a thing to.	<i>yii</i> , a tree.	
<i>uina</i> , wisdom.	<i>yim oka</i> , beyond.	
<i>uicao</i> , to be wise.	<i>yinua</i> , to say so.	
<i>uve</i> , a leopard.	<i>yinca</i> , to ask, inquire, offer, tell.	
<i>uyuo</i> , a footprint.	<i>yowao</i> , a question, an inquiry.	
<i>uyo</i> , to have breakfast.	<i>yu</i> , a colour, a stripe.	
W.		
<i>we</i> , to break through, startle game.	<i>yuno</i> , porridge, pap.	
<i>wee</i> , to answer.	<i>yuro</i> , a dove, a pigeon.	
<i>weeba</i> , to be answered.	Z.	
<i>weho</i> , to break in pieces.	<i>zahe</i> , a rib.	
<i>weha</i> , why.	<i>zao</i> , the front of a house.	
<i>weo</i> , an answer.	<i>zara</i> , to select.	
<i>wi</i> , a tendril.	<i>zaro</i> , to clean corn.	
<i>wii</i> , a bodyguard.	<i>zau</i> , an evil omen.	
<i>wika</i> , to-morrow.	<i>ze chwaro</i> , to separate.	
<i>wiku</i> , the afternoon.	<i>ze dela</i> , to fill up a hole.	
<i>wiku koo</i> , to start after noon.	<i>ze khas</i> , to uncover.	
Y.		
<i>ya</i> , to come.	<i>zeru</i> , a bird.	
<i>ya</i> , to tread.	<i>zeru ju</i> , a bird's nest.	
<i>ya kakho</i> , to bring.	<i>zeru tkam</i> , the beak of a bird.	
	<i>zicho</i> , a fool.	
	<i>zio</i> , foolishness, folly.	
	<i>zizize</i> , a mosquito.	
	<i>zokosa</i> , to rinse out.	

## STUDIES IN PRIMITIVE LOOMS.

[WITH PLATE I.]

By H. LING ROTH.

## II.

## 5. AFRICAN LOOMS.

IN so far as my information extends there are seven forms of looms in Africa, with local variations, which, considering the enormous area of that continent, its great population with its ceaseless migrations may, perhaps, not be considered much, yet in this respect it appears to be more prolific than either the Asiatic or American Continents. The forms are :—

1. The Vertical Mat Loom.
2. The Horizontal Fixed Heddle Loom.
3. The Vertical Cotton Loom.
4. The Horizontal Narrow Band Treadle Loom.
5. The Pit Treadle Loom.
6. The Mediterranean or Asiatic Treadle Loom.
7. The "Carton" Loom.

These forms are easily distinguishable and occupy distinct areas, although in parts they overlap considerably.

1. *The Vertical Mat Loom*.—This loom, the most primitive of all, has a wide distribution, extending from the West Coast to the east of the Great Congo Basin, and is often spoken of as a grass loom on account of the warp and weft (neither of which is twisted or spun) having the appearance of grass. The filament used is, however, obtained from the leaves of the Raphia palms, *Raphia ruffa*, *Mast.* and *R. vinifera*, which flourish, the former in East Africa and Madagascar, and the latter in West Africa. The outer cuticle of the leaf is drawn off and the underpart cut into thin filaments by means of a leaf splitter, Figs. 48A and B. The specimen in Bankfield Museum consists of 109 thin slips of cane, 4 mm. wide, securely and ingeniously fastened together and fitted into a suitable frame. The loose ends of the slips of cane are pointed, and when the splitter is drawn lengthwise along the surface of the flayed cuticle it cuts it up into numerous filaments which are used as warp and weft without further preparation. Besides the raphia leaf filament, Sir H. H. Johnston<sup>1</sup> informs us that in the western and south-western Congo basin short cloths were also made from grass.

<sup>1</sup> *Geo. Grenfell and the Congo* (London, 1908), ii, p. 589, footnote.

The loom has two representatives in Bankfield Museum, one from the Kwa Ibo River, West Africa, kindly given to the Museum by the late Mr. John Holt, a well-known Liverpool merchant, in 1900, and the other from the Ba-Pindi people, in Central Congo, obtained in 1909 through the kindness of Mr. E. Torday.

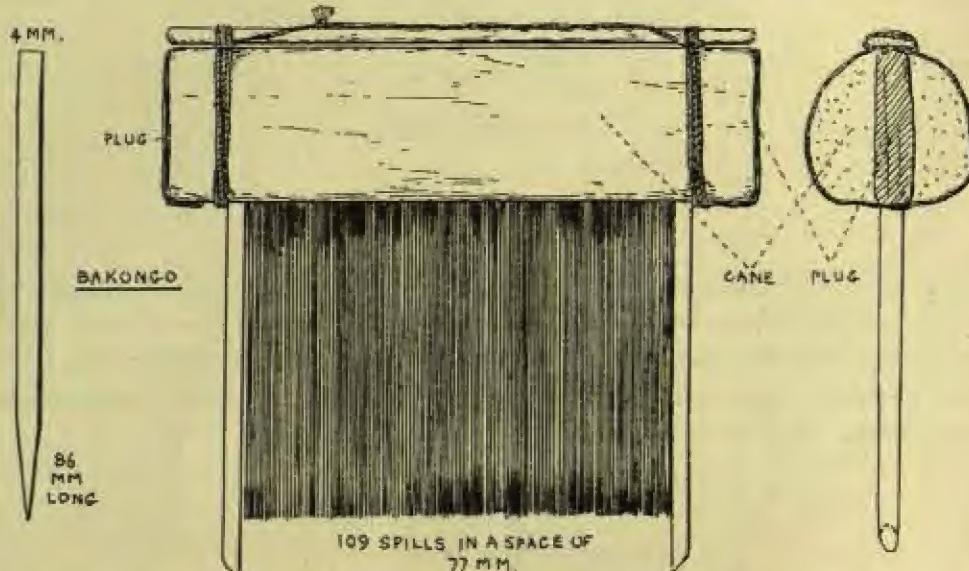


FIG. 48A. BAKONGO LEAF SPLITTER BANKFIELD MUSEUM (E.TORDAY)

The Kwa Ibo loom is evidently a very close facsimile of the one depicted by Du Chaillu as in use by the Ishogo, Fig. 49. The web, or woven mat, width is approximately 16 inches, or 41 cm., and its length from beam to beam is about 57 inches, or 1.45 m. The warp beam consists of a piece of tree branch without the bark, 32 inches, or 81 cm., long. The breast beam consists of a portion of palm leaf mid-rib or stem, common to all these looms, having a large slot at either end wherewith to fix it on to its upright supports.

The method of attaching the warp to the breast and warp-beams (see Figs. 50 and 51 A and B) is, as in all these looms, a complicated one, on account, no doubt, of the comparative smoothness of the filament, which does not bind well. The warp filaments are split up into seventy-three bunches, and their ends knotted on to a heading rod which is fitted into the groove of the breast beam, Fig. 50, all being held in position by some twisted lashing.

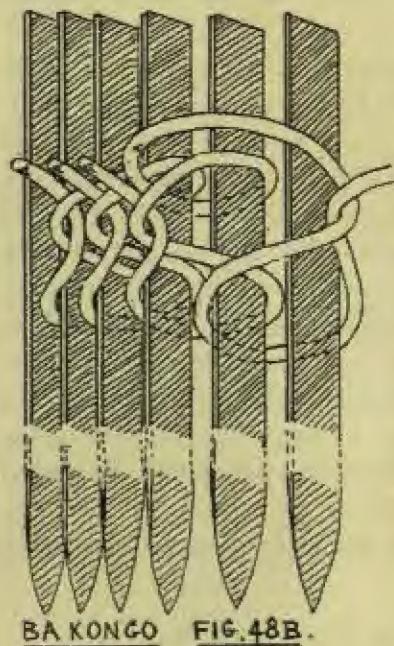


FIG. 48B.

At a distance of about 45 inches, or 1·14 m., away from the breast beam, the warps are again bunched, but this time into fifty-seven bunches, a number which naturally does not agree with the bunching at the breast beam. These bunches are attached to the warp beam by intermediary cords, with slip knots, Fig. 58, which are wound twice round the warp beam and then, accumulating as they proceed from left to right, run along it towards the top right-hand corner, where they are tied into one big knot.



ISHANGO MAN WEAVING. FROM  
DU CHAILLU'S ASHANGO-LAND. LONDON. 1867.  
FIG. 49.

The heddle, according to Du Chaillu's drawing, Fig. 49, looks as though it were in reality two heddles, and Ephraim has taken it to be such.<sup>1</sup> But there is only one heddle, Fig. 51A, the explanation being that the heddle rod consists of two independent parts which, for the sake of convenience in weaving, the worker holds apart with his fingers and thumb and so misleads one at a cursory glance. Both parts,

<sup>1</sup> *Op. cit.*, p. 18.

by the way, are made up of two pieces of split cane, Fig. 51B, but that does not affect the question. A varying quantity of filaments is made up like a skein, knotted at certain intervals and placed zig-zag between the higher pair of split canes and the lower pair, Fig. 51A, and fastened in position so that the knots appear just above where the split canes are tied together, Fig. 51B. In this heddle there

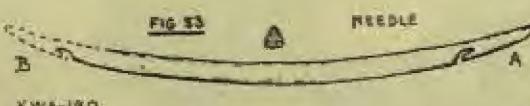
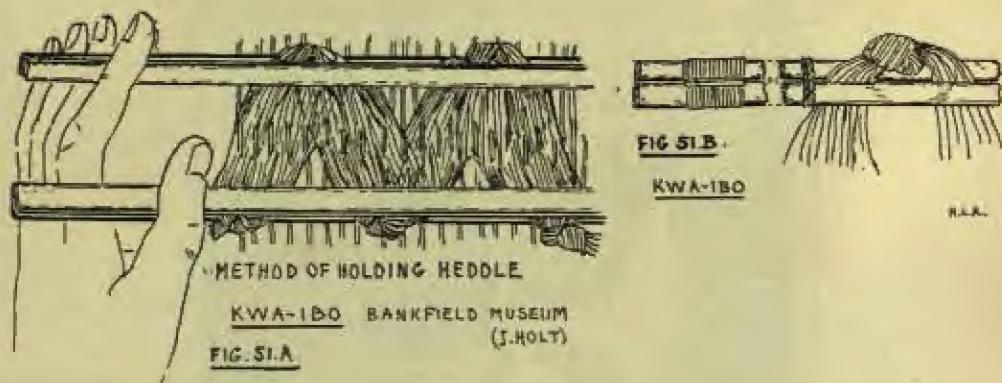
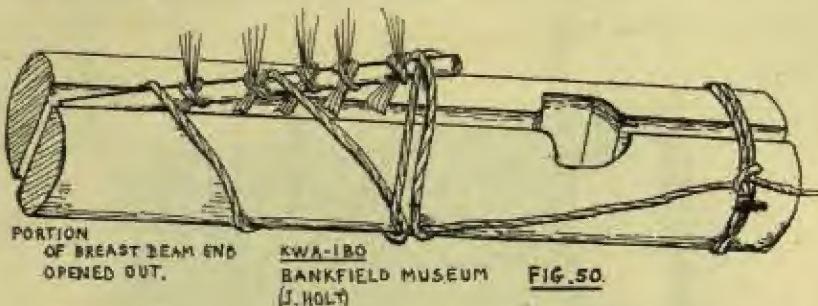
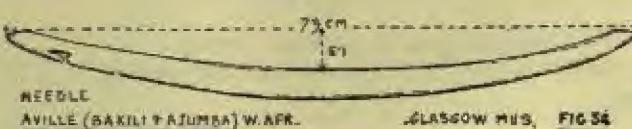
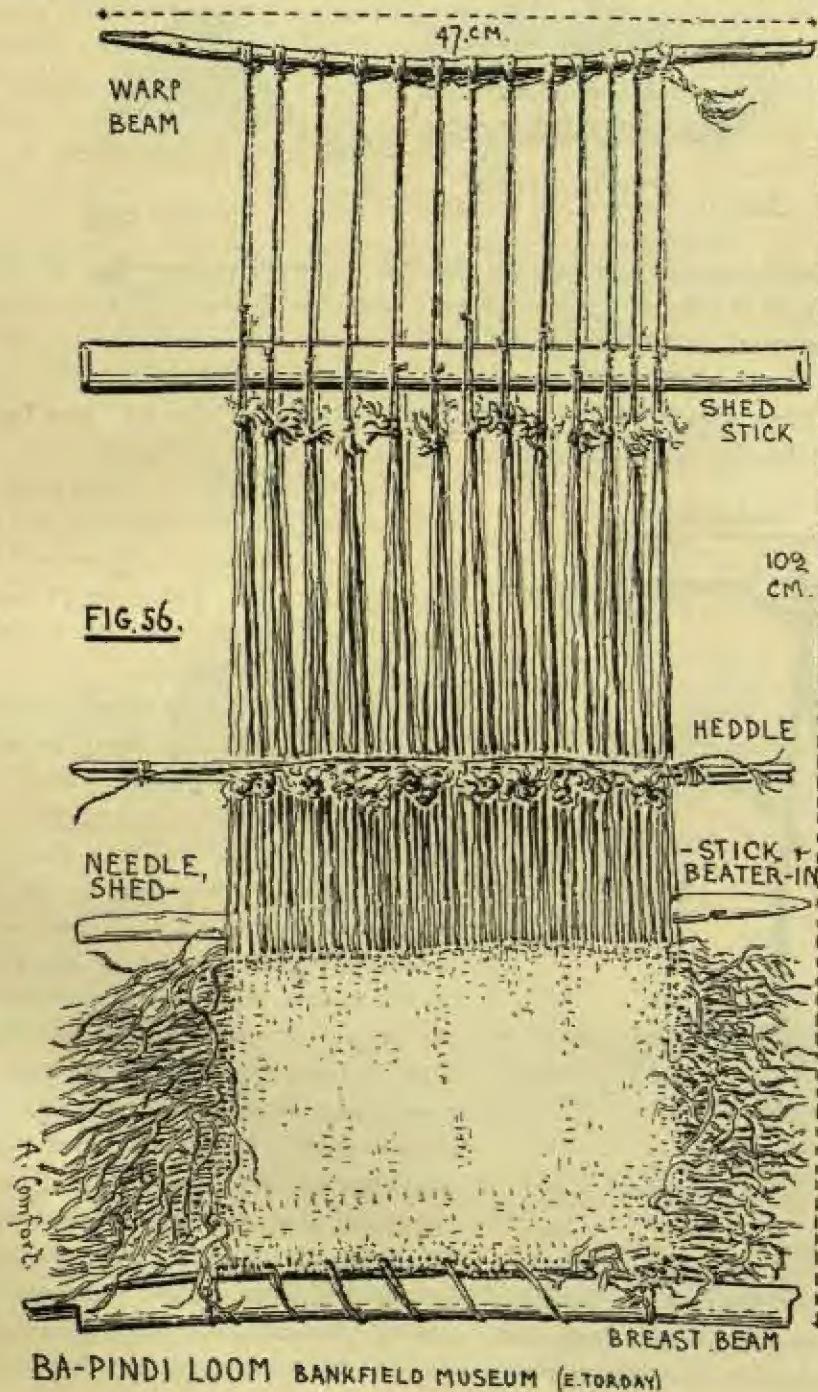


FIG. 53. NEEDLE END BABUNDA  
KWA-IBO, CONGO, MANCHESTER MUS.

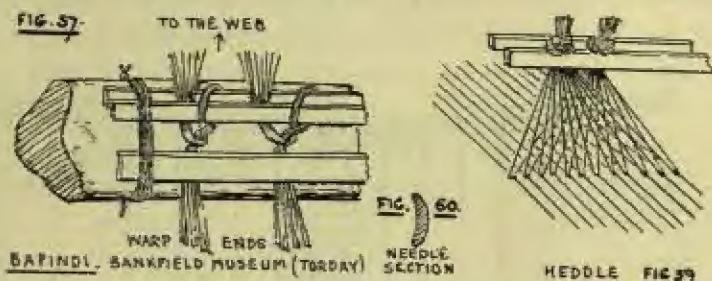


are eight such skeins, and generally speaking some of the filaments of the adjacent skeins are made continuous, but with others they are not so. Some of the individual warp filaments are held up to the heddle rod by three leash filaments, some by as many as ten—there is no fixed rule—the irregularity being apparently due to the irregular splitting of the leaf. In working, as shown, the warp between the two sets of rods is barely visible, being covered up by the profusion of leash filaments.

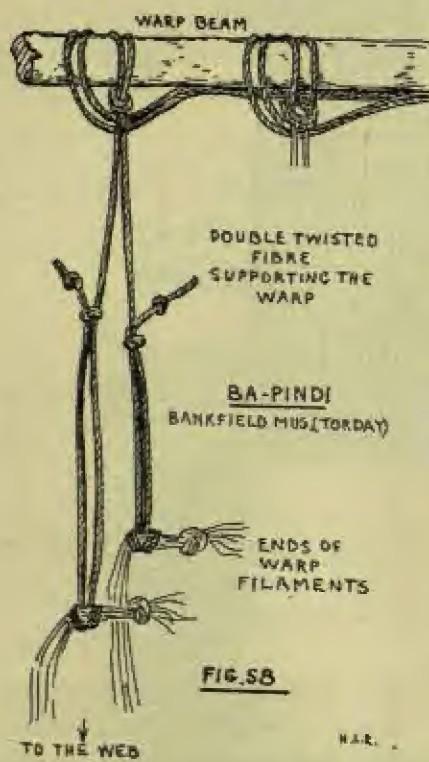
The loom is provided with two laze rods 14 and 16 inches, or 36 and 41 cm., long respectively and  $\frac{5}{8}$  and  $\frac{3}{4}$  inch, or 1.6 and 1.9 cm., in diameter; one rod is therefore shorter than the width of the web and the other only just a little longer. It is provided with a picker or warp raiser, Fig. 52, which is nothing more than a smoothed branch 15 inches, or 38 cm., long, tapering to a blunt point at one end.



In all these looms the sword consists of a combination of needle, shed stick, and beater-in combined, Fig. 53. It is of a hard dark wood, somewhat curved longitudinally and is, as an exception, furnished with two nicks for carrying the weft.



The nicks are invariably cut towards the adjacent needle point so that, as the point of the sword is used as a shed opener, it would seem the method of working is to put the sword or needle through the shed, fit the weft into the notch and draw back the sword, which draws the weft with it and makes the pick. This method does not agree with the details of Du Chaillu's illustration, Fig. 49. In a Babunda needle in the Manchester Museum the nick is cut both ways, Fig. 55.



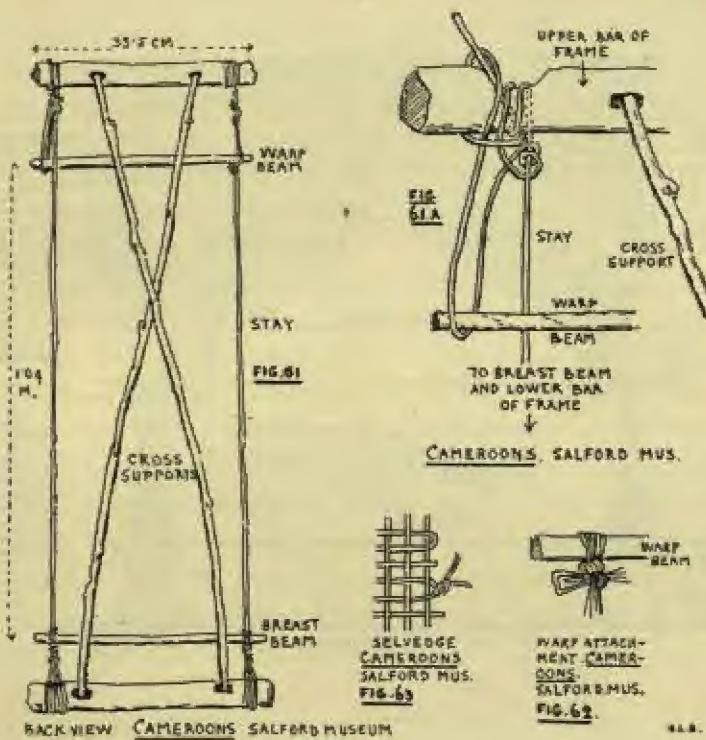
The weft is discontinuous, each piece being a few inches longer than the width of the web; there is no selvedge, and hence no temple is used. There are 22 picks to the inch, or 8·7 to the cm., and 31 warps to the inch, or 12·3 to the cm.

The Ba-Pindi loom already referred to, Fig. 56, differs from the Kwa Ibo loom in some details worth noting. The length overall is 49 inches, or 1·24 m., with a web width of 18½ inches, or 47 cm. The method of attaching the warp ends to the breast beam is as follows, Fig. 57. The ends are passed between a pair of thin heading rods, then over and under both pieces and into the loop thus formed, which on drawing tight becomes a knot. This arrangement is placed on the beam and an extra batten, consisting of a wider and larger piece of cane, placed over the warp ends to just below the knots and then all lashed on to the beam by means of some coarse cord.

In another specimen in Bankfield Museum this extra batten is cut out of the breast beam itself and fitted back into its place with the warp ends between it and the beam, which ensures a firmer grip. About 30 inches, or 76 cm., more or

less, from the breast beam the warps are bunched together into twenty-six lots and connected up with the warp beam as in the Kwa Ibo loom, only, instead of all the cord ends being carried to the right-hand top end and there tied into a big knot, they are cut off at various lengths.

The heddle, Fig. 59, consists of two strips of cane between and on which rest eight sets of two knots each of the leash ends which support the warp. Every leash, like the warp and weft, consists of about twelve to fifteen separate filaments. Each set of leashes is distinct from the next, i.e., is not continuous and extends only from one knot to the other of its set and not beyond, and is so arranged that when the knots are placed side by side the leashes separate out and cross one another.

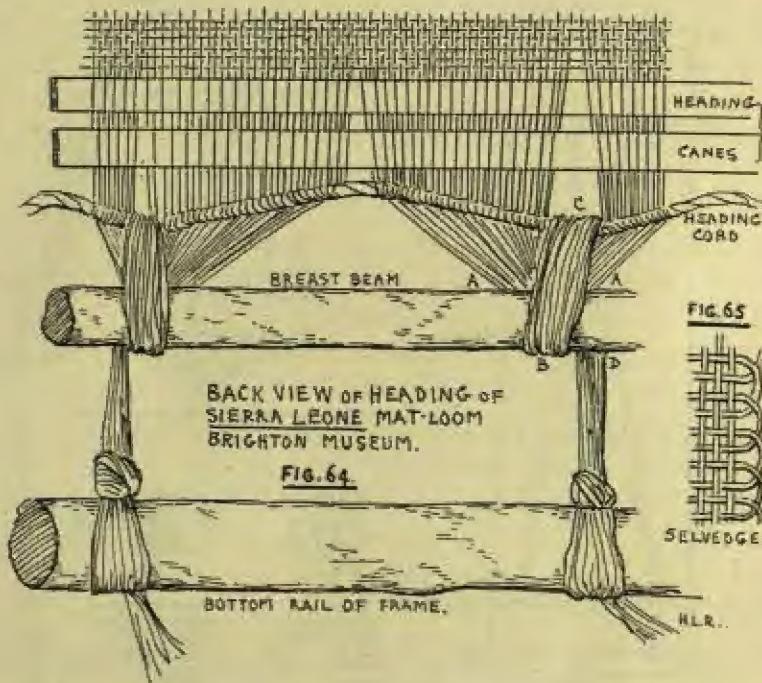


There is one shed stick made of palm leaf mid-rib. The needle is curved in transverse section, Fig. 60, with the working- or beating-in edge almost as thick as the back or opposite edge, which is usually broader. Sometimes both edges are sharp and frequently the working edge is serrated with wear.

In a loom from the Cameroons in the Royal Salford Art Gallery and Museum there is an arrangement, Figs. 61 and 61A, found also elsewhere in West Africa, for obtaining rigidity in the loom frame and therefore better weaving. It consists of two stout rods held apart by means of two cross supports (wood branches) and triced together by means of stays (lianas), the breast and warp beams being made fast to the stays. The holes in the two stout rods into which the cross supports are fitted are at the back of these rods and the cross supports are curved like a bent

bow and so act like a spring in keeping the stout rods and beams well apart. The warp attachment is very simple, Fig. 62.

On this loom the web (which is omitted from the illustration for the sake of clearness) shows an incipient stage of selvedge. Occasionally longer pieces of weft than merely suffice for one pick are used and are turned back at the edge ready for the next pick and so making a selvedge, Fig. 63, or occasionally two weft ends are tied together in a knot at the edge, which again forms a selvedge. The casual, and therefore early, stage of the selvedge is indicated by the fact that these knots are 18, 8, 16, etc., picks apart; neither do they correspond at the opposite edge. Other details of this loom are: width of web 10 inches, or 25·4 cm., and about eight picks to the inch, or three to the cm.

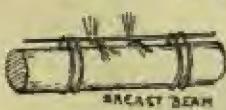
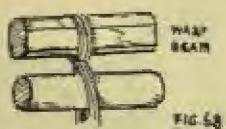
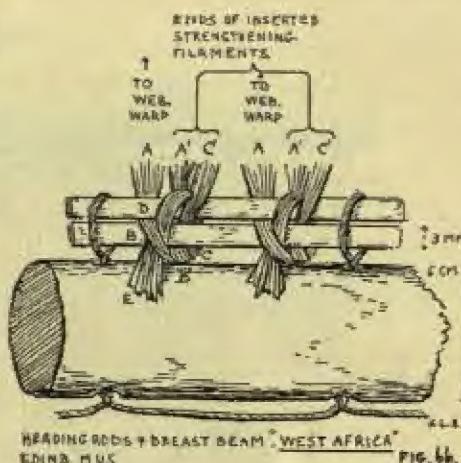


A complicated form of heading is shown in a loom, said to come from Sierra Leone, in the Brighton Museum, added to the collection there in 1886, and is explained by the illustration, Fig. 64. The details are: frame supported by cross supports and stays is  $57\frac{1}{2}$  inches, or 1·47 m., long by  $27\frac{1}{2}$  inches, or 70 cm., broad. Length, breast beam to warp beam inclusive, 35·5 inches, or 90 cm., and width of web  $8\frac{1}{2}$  inches, or 21 cm. Approximate number of warps to the inch  $42\frac{1}{2}$ , or 16·6 to the cm., and  $20\frac{1}{2}$  wefts to the inch, or 8 per cm. The weft is not continuous, but there is a perfect selvedge, Fig. 65. A somewhat similar selvedge is found on an Old Calabar loom in Bankfield Museum, Fig. 75. A longitudinal pattern is obtained by dyeing the warp previous to laying out.

A different form of heading arrangement is shown on a loom, Fig. 66, of unknown provenance in the Royal Scottish Museum, Edinburgh, where the cord

fastening the heading rods to the breast beam are put through holes in the latter instead of winding round the beam as is usually the case. In a loom from Mongo in the same collection (Edinburgh) there is complete selvedge, Fig. 67, on both edges, which however is not brought about by a continuous weft. After the pick is made the end of the weft is returned over the pick for a distance of about half an inch, or 11 mm., when it is allowed to emerge, and floats free like a sort of inner fringe. In this loom the warp attachments are simple, Fig. 68, and the sword while curved in transverse section is longitudinally quite straight, which appears exceptional, Fig. 69.

The Liverpool Museum possesses a bag loom, Fig. 70, with completely woven bag still in position, and the Glasgow Art Gallery and Museum possesses another such loom on which only a portion of one side of the bag loom has been completed. As the incomplete bag makes a more interesting study, it will be as well to describe the Glasgow one. The frame is supported by cross supports and stays as in Fig. 61. The warp is so beamed that one side of the bag may be woven first, then when completed the loom is turned back to front and the other side of the bag woven. The method of division of the warp for the front and back is shown in Fig. 74: it is the same for both looms. Curiously enough there are nearly double the number of warp in the set for the back, yet to be commenced upon, than there are in the set for the half-finished front. Perhaps some of the former are cut away when weaving commences, or perhaps they are preparatory for the two sides of a second bag off the same loom with the same beaming. The shape of the bags is that of a

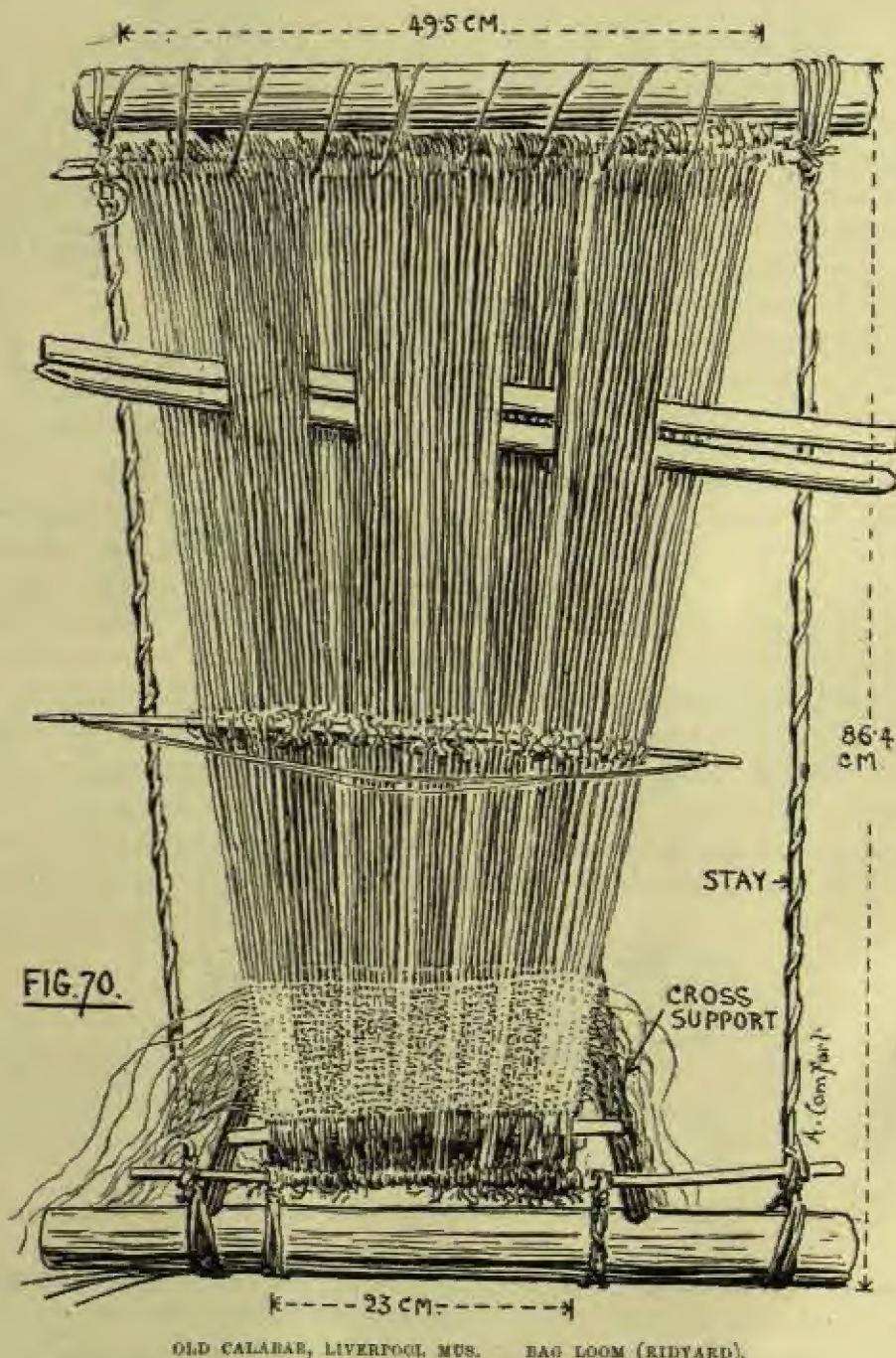


MONGO (? SANNAGA R. CAMEROUNS). | EDINBURGH MUSEUM. H. 12.

truncated isosceles triangle, with top and bottom parallel but the bottom narrower than the top, with the sides expanding regularly from bottom to top.

On the half-finished front side there are 62 bunches of warp covering a width of 18½ inches, or 47 cm., on the warp beam; these bunches are reduced in number

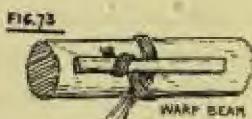
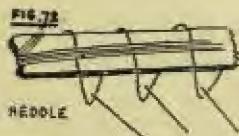
to 21 thicker bunches covering a width of 8 inches, or 20 cm., on the breast beam. There is no inserted warp, the number of filaments on both beams being the same; the number of warps *to the inch* is therefore more on the breast beam than on the



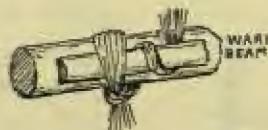
warp beam, being compressed into  $10\frac{1}{2}$  inches, or 27 cm., less space than on the warp beam. The bunches are :

Warp beam : 17 non-coloured, 8 black, 12 red, 8 black, 17 non-coloured.

Breast beam : 7 non-coloured, 2 black, 4 red, 2 black, 6 non-coloured.



OLD CALABAR, GLASGOW MUS.,  
BAG LOOM.



WARPS FOR  
FRONT BAG (BACK BAG)



BAG LOOM, OLD CALABAR, LIVERPOOL MUS.

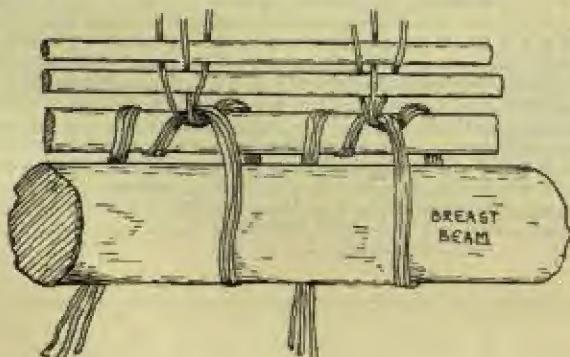
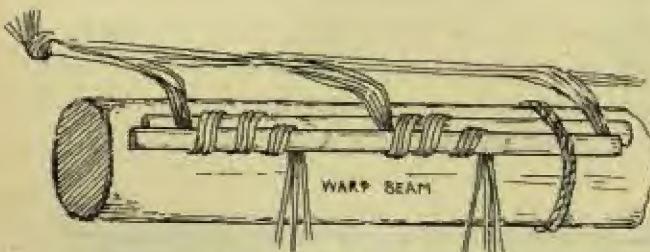
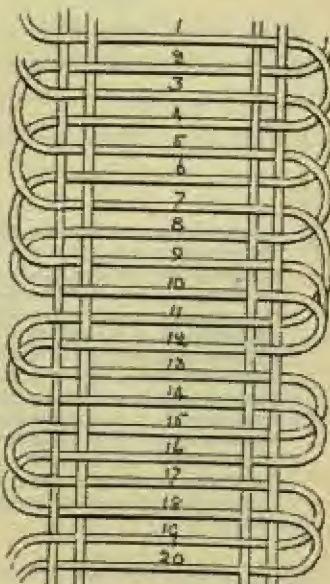


FIG. 75.

OLD CALABAR.

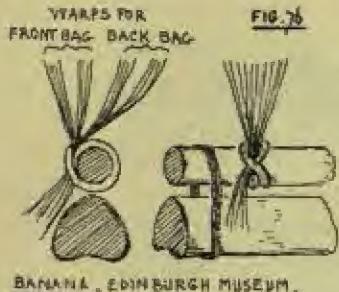


SELVEDGES SHOWING CHANGE  
(AT NO. 18) WHEN TWO WEFTS  
MERGE INTO ONE.

BANKFIELD MUSEUM.

H.L.R.

To prevent the outer warp getting awry, at intervals of  $1\frac{1}{2}$ —2 inches, or 4—5 cm., the weft ends are knotted together over the outermost warp, Fig. 71; but this can only be a temporary or working selvedge to be undone preparatory to interlacing the finished woven front and back.



On the back, evidently to keep the warp of the bag from getting entangled with those of the front, seven laze threads of twisted fibre have been drawn irregularly through it, the ends of these laze threads being fastened to the stays.

The heddle rod is a flat piece of wood having the leashes kept in position by means of longitudinal cords. Details of the warp attachments are given in Figs. 73 and 74.

In connection with bag looms may be noticed one from Banana, Congo River, in the Royal Scottish Museum, Edinburgh, which is prepared for weaving two bags (or four mats ?) from one and the same breast beam, but with distinct warp beams. Each set of warp is provided with a Du Chaillu heddle, laze rod and needle, the warp ends being fixed along the warp beam in the usual method. All the needles are concave on the working edge with corresponding convexity on the back edge. The width of the weave is  $16\frac{1}{2}$  inches, or 42 cm., fine work. The object of weaving four sides off one breast beam will save labour in beaming; but only one person can work at it at a time, for all the heddles are placed on the same side of the warp and two people working at it would interfere with each other.

A very interesting loom, Plate I, is one marked Okale (Ba-Hamba) in the British Museum. It is in most respects like the rest of these looms, but shows a pattern (Fig. 77) obtained by means of black-stained wefts, the pattern being roughly arranged in the warp near the warp beam by means of 36 strips of cane 4 mm. wide, which are in fact pattern laze rods. In this specimen, owing to previous rough handling, I have not been able to prove conclusively the connection

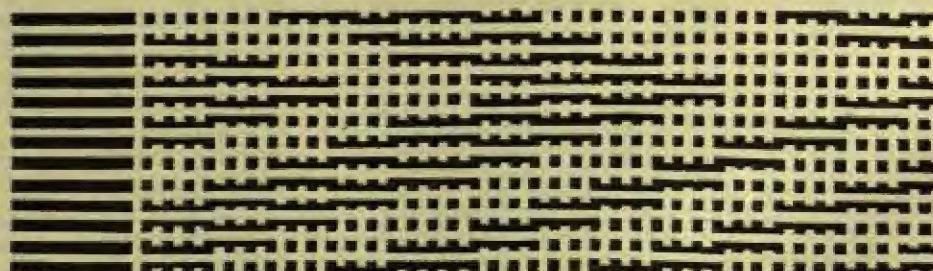
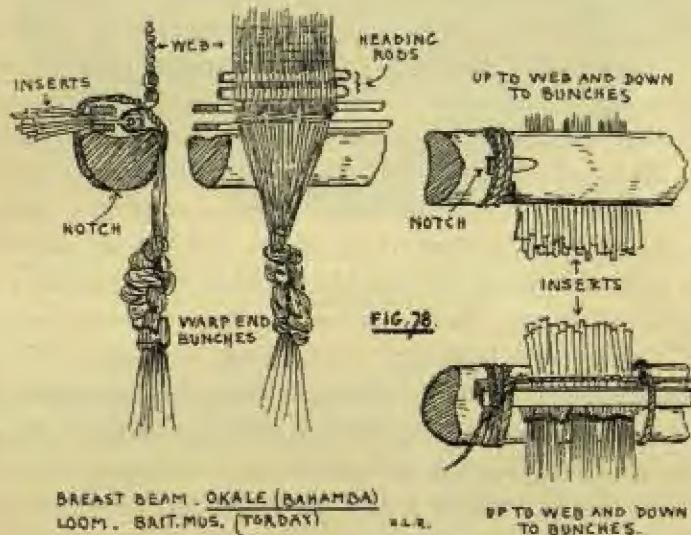


FIG. 77. PORTION OF PATTERN ON OKALE (BA-HAMBA) LOOM, BRIT. MUS. (TORDAY).

between the two by running the fingers along the warp, but that a connection exists is evident from the illustration. As already mentioned (Vol. XLVI, p. 306), this method is found in Ancient Peru and in the East. The dimensions of the loom are: length, breast beam to warp beam inclusive, 34 inches, or 86 cm., the knotted warp

ends hanging down a further 12 inches, or 30 cm.; width of web 16 inches, or 40·5 cm.; 30 warps to the inch (or 11·8 to the cm.); 24 picks to the inch (or 9·5 to the cm.). The warp is always in pairs ("sisters") and hence passes through the leashes in twos; these leashes are of finer filament than the warp and weft. The needle is of the usual hard wood, slightly concave on the working edge, which is blunt but without serration. The selvedge is apparently made after the completion of the weaving, but there are selvedge knots, as shown in Fig. 71, every 20 to 24 picks. Details of the complicated warp attachment to the breast beam are given in Fig. 78.

As to the origin of this mat loom there is no other loom in any way comparable with it except perhaps the Vertical Cotton Loom discussed on pp. 135–144, and when we have said that they are both upright looms and are furnished with a heddle, the comparison is at an end. There is a great gulf between this mat



loom and the Ancient Egyptian vertical looms, for the illustrations of which we are indebted to N. de G. Davies.<sup>1</sup> Both are upright, both have a heddle, and both are worked by men—as a rule. The Ancient Egyptian weaver used a ball of yarn for his weft, while the modern African uses a needle as weft-carrier, which serves also as a shed stick and beater-in. The Ancient Egyptian loom had, in so far as we can judge, ordinary heddle leashes which were not bunched, and the African weavers have bunched leashes. The only comparison one can make is with the bunching of the leashes on the Livelzi loom, Fig. 87. This, however, gives one the impression of a raphia weaver adopting his own method with an introduced filament, i.e. cotton, and as the bunching lessens the control of the weaver over his warp there is not the likelihood that the cotton weaver adopted the raphia weaver's method.

<sup>1</sup> See *Ancient Egyptian and Greek Looms*, by H. Ling Roth (Halifax, 1913).

All the intact specimens which have come under my observation show considerable neatness in the make, being well and carefully put together; the weft-carrier is nicely finished; the comb-like leaf-cuticle splitter is a trim little article; the work produced is excellent of its kind, especially the embroidery work of the Ba-Kongo, for instance, which, although considered to be a recent introduction,<sup>1</sup> is fine and artistic. As will have been seen, the selvedges are in various stages of development, and the heddles show some variation in their leash attachments. The parts may be crude, but they are not slovenly made, and it is very clear that much care has been devoted to getting both the loom and the web to a comparatively high pitch of excellence. Altogether one gets the impression that the makers and users of this form of loom are a progressive people. The form is, however, extremely primitive, and this, together with the mat work found side by side, tempts one to conclude that the form may be indigenous to the habitat of the raphia palms. But before adopting such a conclusion it will be as well to examine the various steps apparently necessary to be taken in the transition from mat work<sup>2</sup> to weaving, for the majority of students who have looked into the question of the origin of weaving are of opinion that it originated in basketry or matmaking.

The transition appears to be due to an appreciation of the principle of the heddle, as yet unknown, and the translation of that principle into a mechanical factor. The principle is already in action when, in making a mat, the worker raises (1) one of the filaments, the warp, to pass or interlace the other filament, the weft, and it is intensified when he raises two or more warp filaments together (2) with the purpose of saving labour. In so far as one can judge, this would have been followed by permanent bunching—i.e. by means of leashes (3)—which would take the place of the fingers, and is the first mechanical step towards the adoption of the heddle. At this point, if not sooner (I judge from my own experiments), it would probably be found that some arrangement (4) is necessary whereby the warp can be kept more or less taut, the matter depending largely on the nature of the material employed. A further advance would consist in attaching the leashes in bunches to short pieces of wood (5) to enable them to be lifted more easily—a sort of handle, in fact—as can be seen in a belt loom from Iceland in Bankfield Museum, where there are three such sets of warp-raising leash-bunches, each attached to a wooden rod 5 cm. long, by means of which the whole of the required warp is raised at thrice. In the Ba-Pindi loom we have the complete transition where the leashes, although still bunched, connect the warp to a single rod (6), whereby the whole of the required warp is raised at once and the mechanical factor has come into full play.

Accepting this surmise of the progress of the transition as approximately correct, we are in want of evidence as to steps (3) and (4) in the development of this

<sup>1</sup> Torday and Joyce, "Les Bushongo," *Ethnographie*, ser. iii, tome ii, fasc. i (Bruxelles, 1910), p. 45.

<sup>2</sup> I am not here referring to plaited mats, but to mats the components of which are interlaced at right angles to each other without the use of a frame.

mat loom, and for want of this I must for the present withhold any definite conclusion as to the indigenousness of the loom where we now find it.

2. *The Horizontal fixed Heddle Loom.*—This loom, Fig. 79, on which in Madagascar both raphia fibre mats and silk cloths are woven, appears to be used in



MANGANJA LOOM. FROM C. & D. LIVINGSTONE'S EXPN.  
TO THE ZAMBEZI. LONDON, 1865. P. 112.

FIG. 79.

Africa for weaving cotton only. It is laid stretched out close to the ground, nearer to the ground in Madagascar and North Central Africa than in South Central Africa, and is worked with the usual laze-rods, spool, and beater-in, its characteristic being the fixed heddle. At first sight such a fixture makes it look somewhat

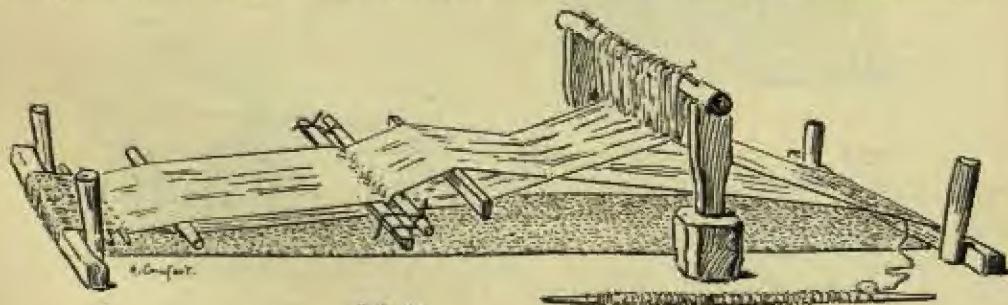


FIG. 80.  
WORKING MODEL OF MADAGASCAR MAT LOOM BANKFIELD MUSEUM, (SIBREE)

awkward to work, but on rigging up a similar loom I found I could work it quite comfortably. A good idea of the loom can be obtained from a study of the illustrations, Figs. 80 and 81, Fig. 80 representing a model in Bankfield Museum of a Madagascar mat-weaving loom brought home by Dr. Sibree in 1915, and Fig. 81

representing a model, likewise in Bankfield Museum, of a loom used by the A-Fipa in their country south-east of the Victoria Nyanza, and north-west of Lake Tanganyika, and brought home six years ago by the Rev. Harry Johnson. In the Madagascar loom the warp (? raphia fibre) is continuous, while in the A-Fipa loom in Bankfield Museum, as well as in one from the same people in the Leicester

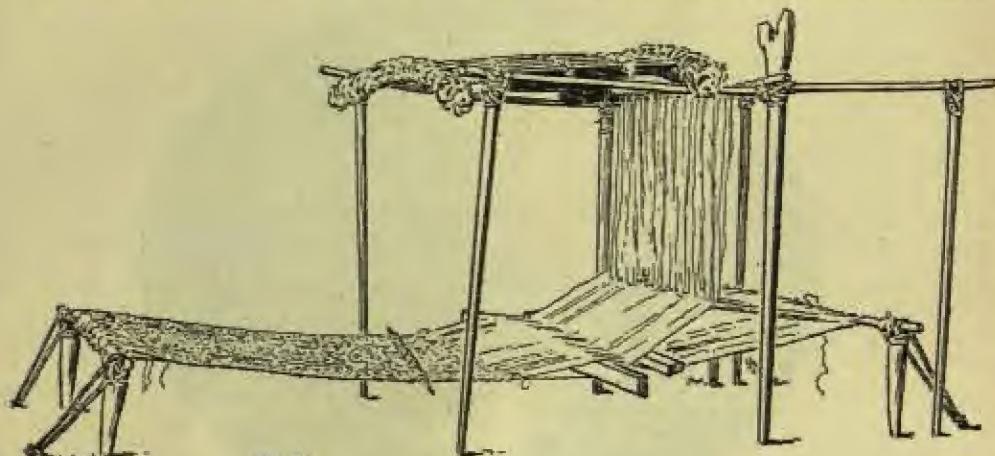


FIG. 81

WORKING MODEL OF A-FIPA COTTON LOOM. BANKFIELD MUSEUM (H. JOHNSON)

Museum, it is not so. In the Madagascar specimen the weft is likewise continuous, but not so in the A-Fipa loom, where the selvedge is finished in a curious way. The yarn on the spool is, of course, continuous, but when a pick has been made, it appears to have been cut off at both ends about  $\frac{1}{2}$  inch, or 1.3 cm., longer than the width of the web and the over-lengths woven in, the result being that the cloth

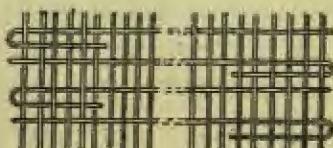


FIG. 82. SELVEDGE A-FIPA LOOM. BANKFIELD MUSEUM (JOHNSON)



FIG. 83A. HEDDLE. PORTUGUESE NYASSA LAND. LIVERPOOL MUS. (W. G. MACMULDRON).



FIG. 86. HEDDLE. MANGANJA. EDINBURGH MUS. (LIVINGSTONE)

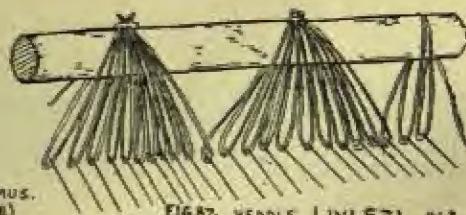
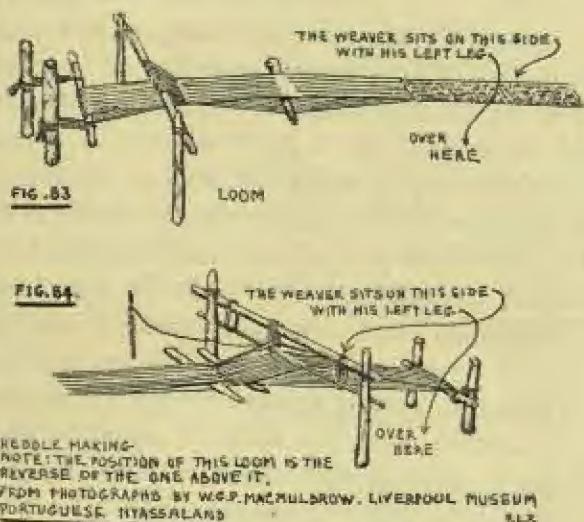


FIG. 87. HEDDLE. LIVLEZI. GLASGOW MUSEUM

for about  $\frac{1}{2}$  inch depth for the whole length of both selvedges is much closer than for the rest of the web, as shown in Fig. 82. It reminds one of the selvedge in the mat-weaving loom, as illustrated in Fig. 87, with this difference, that in the A-Fipa cloth the over-length is placed *by the side* of the pick, while in the Mongo mat it is placed *on top* of the pick.

Last year Mr. W. G. P. Macmuldrow gave the Liverpool Museum one of these looms from Portuguese Nyassaland, but unfortunately without the frame supporting the heddle. He also gave that museum a photograph of a native boy weaving, and another of a native boy rigging up the heddle for warp-laying.<sup>1</sup> The photographs, owing to difficulties in the taking, are not quite so clear as could be desired,



but I think the essentials have been reproduced in the illustrations, Figs. 83 and 84. The dimensions of this Portuguese-Nyassaland loom are: Beam to beam inclusive, 67 inches, or 1·70 m.; width of web, 4 inches, or 10·2 cm.; 25 picks to the inch, or 10 to the cm.; length of heddle rod, 25 inches, or 63 cm., with a diameter of 2 cm.; spool, 22·5 cm. long, of the *Ba* type. The yarn for both warp and weft does

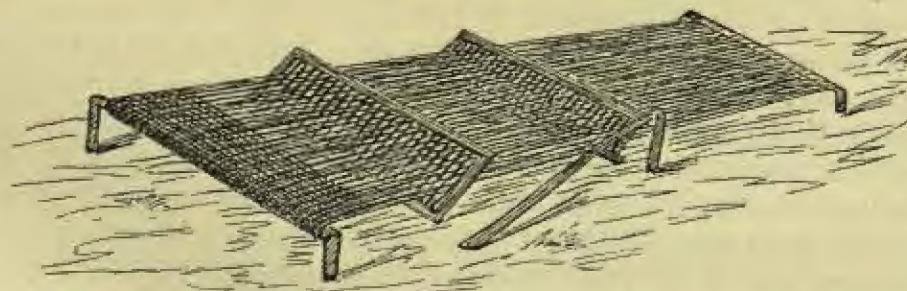


FIG. 85. Abbild. 23. Webstuhl vom unteren Sambesi. Nach Globus 10/1866.

not appear to be indigenous. The warp ends are fixed on to the beams by means of some gluten, which has hardened like dried breadcrumbs. The frame of the model in the Leicester Museum is likewise fixed together with some resinous substance,

<sup>1</sup> H. Schurtz, in his *Urgeschichte der Kultur* (Leipzig, 1900), gives us an illustration of a Swahili likewise laying his warp, and has even the heddles in position, but it is somewhat misleading, as he does, to label the illustration "Swahili at a Loom," for the man is *not* weaving.

and in the Bankfield Museum model the parts are lashed together. In a Livlezi loom, Fig. 87, about to be described, the warp is also fixed to the beams by a sort of resinous gum.

Judging from a photograph of a silk loom placed at my disposal by Dr. Sibree, and partly reproduced in Fig. 90, it would seem that occasionally in Madagascar a second heddle is in use. It is upheld by two iron supports (*BB*), which appear capable of being brought forward towards the weaver and pushed back, actions which must cause the heddle to be lowered and raised.

Dr. Livingstone was the first to give an illustration of the Fixed Heddle Loom. This was in 1865.<sup>1</sup> It is reproduced in Fig. 79. The now defunct journal, *Globus*, reproduced it fairly well (No. X, 1866), but with embellishments, and with the mistake of taking the spool for an ordinary stick. Ephraim, without verifying his quotation, ignores Livingstone in the matter, ascribes the loom to *Globus*, and reproduces it past all recognition, as shown in Fig. 85. Livingstone does not describe it, but he brought home a specimen which he obtained from the Ma-Nganja, south of Lake Nyassa, and which is now in the Royal Scottish Museum, Edinburgh. This specimen is unfortunately incomplete, and does not include the heddle supports. Its details are: The warp (of cotton) is many feet long; the width of the web at the heading is 23 inches, or 58 cm., but where the work has ceased it is only 20 inches, or 51 cm., wide, so evidently a temple was not in use. The leashes of the heddle are continuous, and are secured in position by knotting over a cord which runs the length of the rod, Fig. 86. The spool is a piece of split-pointed cane 39 inches, or 99 cm., long.

Another specimen of this loom is to be found in the Glasgow Art Gallery and Museum, marked "Livrezi loom, south of Lake Nyassa." It is likewise a cotton loom. Length, beam to beam inclusive, 61 inches, or 1.54 m.; width of web at heading, 20½ inches, or 52 cm., but 18 inches, or 46 cm., at the last pick when work was suspended, indicating absence of temple. Both beams are of hard cane, and, as already mentioned, the warp is gummed to them. There are 52 warps to the inch, or 20·5 to the cm.; and 12 picks to the inch, or 4·7 to the cm. The warp is not continuous but the weft is. The spool is 31 inches, or 78 cm., long. Like in the Ma-Nganja loom the length of the spool appears out of proportion to the width of the web. The heddle leashes are sisters and continuous, and 48 or 50 are bunched over the heddle rod, Fig. 87, as in a specimen of the raphia looms of the Ba-Pindi, Fig. 59, as already mentioned. In the Livlezi loom and in the Ma-Nganja loom, as well as in the working models in Bankfield and the Leicester Museums, the yarn used has a strong twist so that the cloth has the well-known crinkled appearance.

What seems to be the same type of loom and found in Darfur is illustrated by Wilson and Felkin.<sup>2</sup> Dr. Felkin says of it: "The looms are very primitive;

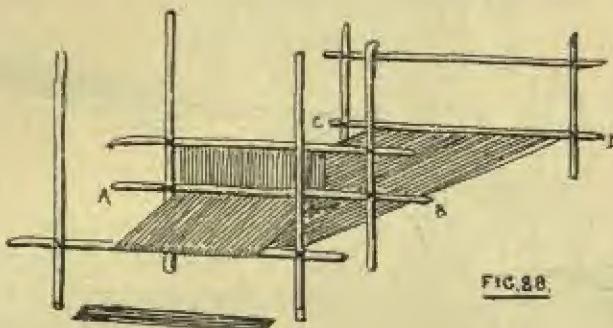
<sup>1</sup> David and Chas. Livingstone, *Narrative of an Expedition to the Zambesi and its Tributaries*, London, John Murray, 1865, p. 112.

<sup>2</sup> *Uganda*, London, 1882, p. 274.

they are very narrow, and are usually placed under the hedge or a tree low down on the ground, with a hole made underneath to accommodate the weaver's legs." The existence of this pit would lead one to infer that we have to do here with a pit-treadle loom, but the pit is an innovation in connection with this loom, due to contact with the Hindu pit-treadle loom, about which a few words shall be said directly.

It may be mentioned in parentheses that innovations in details, obviously from the East Indies or Arabia, are very common in the lands bordering the East coast of Africa; thus, for example, Miss Werner illustrates in her work<sup>1</sup> a native loom which, while then in use in that part of Africa, must have come from elsewhere, a good but troublesome example of the migration of the arts.

On the face of it Wilson and Felkin's illustration, although it shows clearly the fixed heddle, is defective, and on my asking Dr. Felkin about it he very kindly replied (May, 1916) and acknowledged the incorrectness of the drawing. It is reproduced in Fig. 88. In writing me, Dr. Felkin mentioned that the weaver



LOOM, DARFOUR. WILSON + FELKIN'S UGANDA. LONDON 1862 II.  
[ROD AB SHOULD BE OMITTED; WARP FROM AB TO CD INSERTED.]

"with a stick of hard wood beats the weft away from him. This is the usual method, but I have seen looms where the weaver beats the weft towards him. This is rare, however. As a foot or so of cloth is finished it should be wound up at the back part of the loom if the weaver beats the weft away from him, the reverse is done if he beats the weft towards him." So that the loom is altogether anomalous, as it shows contact on more sides than one. Up to this point, in so far as my knowledge of these looms goes, there is no winding-up of the web as it gets woven, for in the models in Bankfield and the Leicester Museums there are no movable breast beams, although these are good working models, and in the Madagascar and other illustrations the warp is continuous—like that of a seamless garment—and the warp is shifted round as the weaving goes on, which only ceases when the heading nearly meets the tailing. Incidentally it should be stated that Ephraim, again omitting to verify his quotation, reproduces Felkin's illustration and incorrectly ascribes it to Prof. R. Hartmann, who had reproduced it in a popular work

<sup>1</sup> *The Natives of British Central Africa*, London, 1906 (to face p. 196).

entitled *Die Nillaender*. On the other hand, it may be that Felkin's loom marks a point of contact between the southern and northern distribution of the Fixed Heddle Loom, for further north the warp is much longer and does get wound up.

Fig. 89 shows a reproduction of a water-colour sketch by Frederick Goodall, R.A., in Bankfield Museum, of a weaver at work in Upper Egypt. We must not expect accuracy from an artist, but in this sketch I venture to think that he has indicated very well the fixedness of the heddle which places this loom in the class under discussion, only, instead of being supported from a frame above, or resting on wooden supports, it rests on a couple of stones. Then there is the very broad loom used by the Bedawin in Upper Egypt, and apparently along the whole length of the northern portion of the Sahara, which seems to me to be similar to that depicted in Fig. 89A, and which Franz Stuhlmann<sup>1</sup> considers to be identical with the vertical loom, only laid flat. But to me it appears to be a



FIG. 89.

BEDAWIN ARAB  
WEAVING, UPPER EGYPT, ABOUT  
1845, FROM A SKETCH BY FREDERICK  
GOODALL, R.A. BANKFIELD MUSEUM.

modification of the Fixed Heddle Loom. I have *not* seen this loom and only know it by means of illustrations. There is a very poor reproduction of one entitled: *Femmes tissant le Felidj (toile de tente) dans un campement d'Aurès*, facing p. 426 of Lieut.-Col. de L'Artigue's *Monograph de l'Aures*, Constantine (Algiers), 1904. There is a somewhat similar one in Madame Jean Pommerol's *Among the Women of the Sahara*, London, 1900, p. 307; one illustrated by R. Karutz in *Globus*, 1907, XCII, No. 8, p. 119, who by the way mentions that on one occasion two women wove a tent cloth on it; and one by Frederick Goodall, above mentioned, and illustrated in Fig. 89A.

The Ancient Egyptians depicted a loom, pegged out like this one, in the Tombs of Chneu-hotep, but the position of the woman's hand at the end of the heddle and the absence of any indication of a support tends to the view that it is not a fixed heddle. On the other hand, the illustration in the tomb of the Vizier Daga, drawn by N. de G. Davies,<sup>2</sup> shows the weavers' hands quite clear of the

<sup>1</sup> *Ausflug in den Aures*, Hamburg, 1912, pp. 116, 118.

<sup>2</sup> *Five Theban Tombs*, Plate XXXVII.

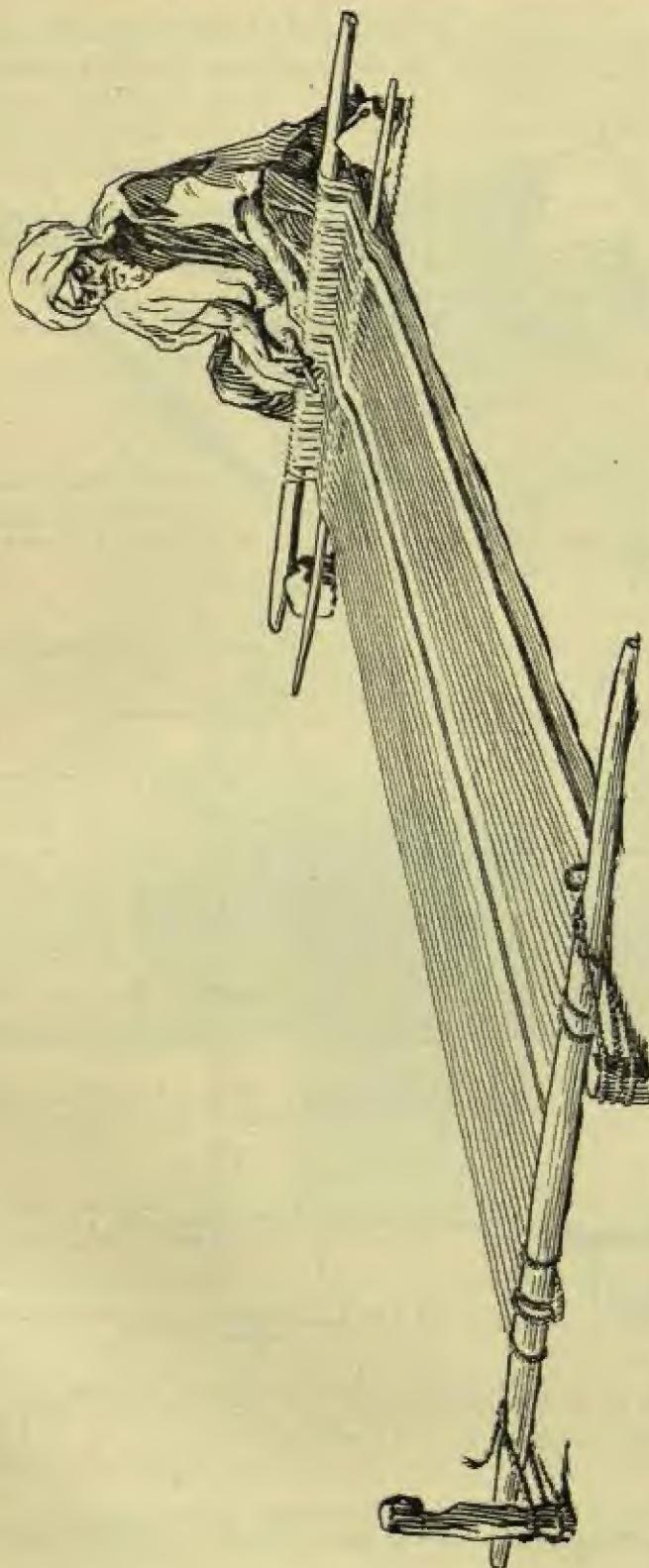


FIG. 69A. BEDAWEN WEAVER. FROM THE PAINTING BY FREDK GOODALL RA. ENTITLED SPINNERS & WEAVERS. REPRODUCED BY PERMISSION  
OF THE OWNER, MR W. K. PARCY OF STANMORE HALL, STANMORE FROM THE ILLUSTRATION IN CASSELL & CO'S ROYAL ACADEMY  
PICTURES, 1892.

heddle, with a curious hook-shaped contrivance at either end, which might possibly be construed into some sort of support, but it is extremely doubtful. Garstang's

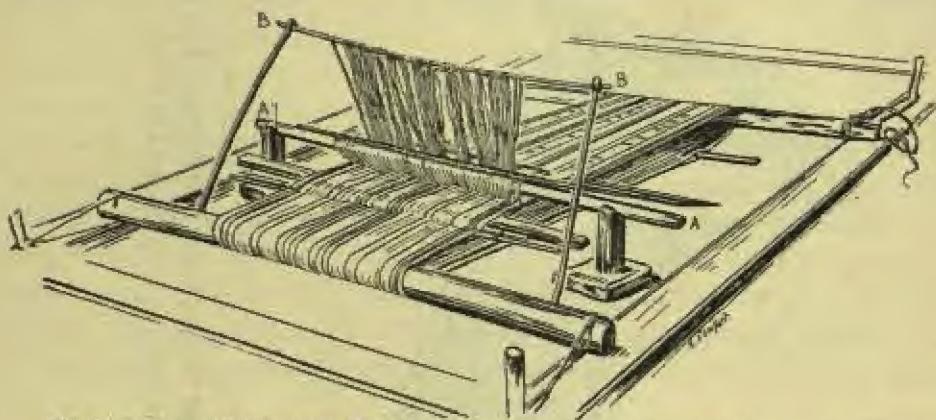


FIG. 90. MADAGASCAR LOOM FROM A PHOTOGRAPH (REV. DR. SIBREE)—AA FIXED HEDDLE ROD. BB LOOSE HEDDLE ROD.

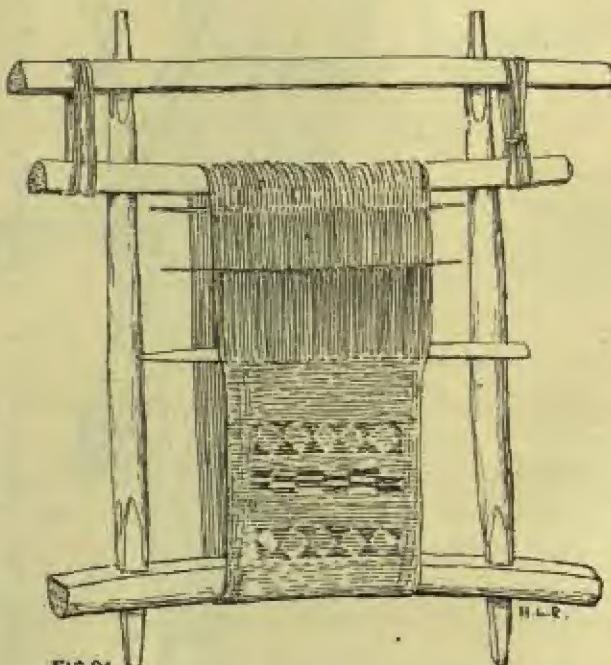


FIG. 91.  
TYPE OF VERTICAL COTTON LOOM, WEST AFRICA.

wooden model of two women weaving, found in a tomb at Beni Hasan,<sup>1</sup> is unfortunately on too small a scale to be of any assistance.<sup>2</sup>

<sup>1</sup> *Burial Customs of Ancient Egypt*, London, 1907.

<sup>2</sup> All these Egyptian looms are illustrated in *Ancient Egyptian and Greek Looms*, already quoted.

The Madagascar looms show Oriental influence, but I think that when Grandidier says that the "loom of the Malagashes is identical with that of the Indo-Oceanic peoples"<sup>1</sup> he goes much too far. It seems certain, however, that it has crossed from the island to the mainland of Africa, and in extending northward met another, a similar loom, coming south from Egypt or Somaliland—its extension westward along the Mediterranean and the Sahara being no doubt due to Arabic-Berber migrations.



FIG. 91A. 'WOMEN WEAVING A JERRI' FROM JEAN POMMEROL'S AMONG THE WOMEN OF THE SAHARA. LONDON 1900. P. 299.

3. *The Vertical Cotton Loom.*—We now come to the vertical cotton loom on which plain and pattern cloths are woven. The illustration, Fig. 91, gives its chief characteristics, as it can be seen at the present day, on the West Coast in Abeokuta, Opobo, etc. In Figs. 91A and 91B we have it as met with at the present, in perhaps a more original form, in Algeria. It is everywhere worked by women only. Miss Gehrtz<sup>2</sup> mentions that at Bafilo, the only place she seems to have observed the loom, the women weavers had a guild such as the men weavers have elsewhere.

<sup>1</sup> *Ethnographie de Madagascar*, Paris, 1908, p. 63, footnote.

<sup>2</sup> *A Camera Actress in the Wilds of Togoland*, London, 1915, pp. 93-4.

The West Coast modification consists of a square frame made up of an upper and lower piece of palm leaf mid-rib or stem into which are fixed two uprights; occasionally, instead of the ends of the uprights passing through holes in the upper and lower ribs, they are merely lashed on to the latter, Fig. 92. The

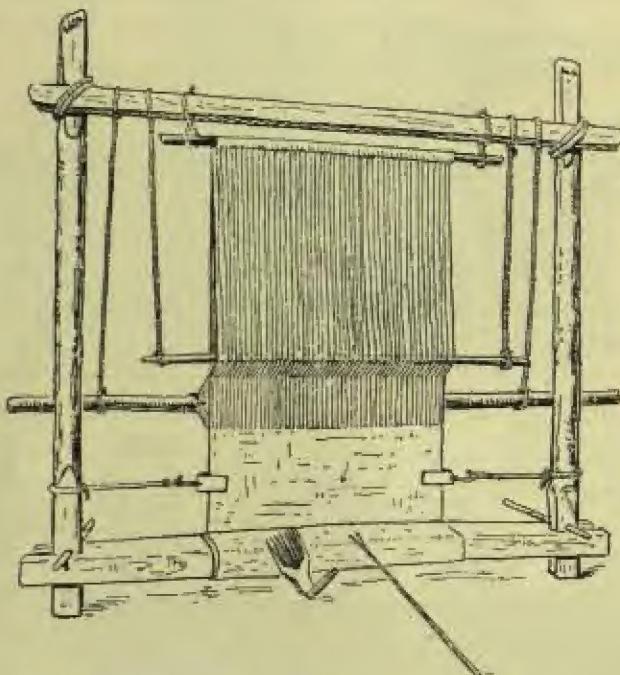


FIG. 91B. VERTICAL WOMEN'S HANDGRIP LOOM. FROM FRANZ STUHLMANN'S AUFLUG IN DEN AUREG, HAMBURG, 1912, AFTER B. TATAN'S METHODE DIRECTE POUR L'ENSEIGNEMENT DE L'ARABE PARLE, ALGER, 1904.

lower rib forms the breast beam, which is sometimes furnished with a supplementary rod A, Fig. 93; the upper rib itself occasionally forms the warp beam, but usually another rib suspended below it does this. As the palm leaf mid-rib employed does not possess much rigidity, the two beams sag towards each other when the warp is *beamed* (*i.e.*, put on to the loom). On the West Coast the warp is continuous, but in Algeria this is not the case. The weaving proceeds from below upwards. Generally the heddle consists of two very thin pieces of cane with spiral leashes intertwined, Fig. 94.

The Bankfield specimen of this class of loom is from Abeokuta, having been obtained there in 1904 by Mr. Cyril Punch, the donor. It is without the upper frame bar. Its dimensions are: length, beam to beam inclusive, 53 inches, or 1·35 m.; width of web, 27 inches, or 69 cm.; 26 picks to the inch, or 10 to the cm.; and 84 warps to the inch, or 33 to the cm. The shed stick, like the two beams, is of palm leaf mid-rib. There are two rods which might be taken for ordinary laze rods, and while they do to a certain extent function as such, the laying-out of the warp indicates them as pattern rods similar to those in Plate I,

and to the pattern threads in the Peruvian loom, Fig. 40, although in the web so far as it is woven there is no weft pattern. These rods are 1 by  $\frac{1}{2}$  inch, or 2.5 by 1.2 cm., in thickness. The heddle, Fig. 95, contrary to the usual, consists of one strip of cane,  $\frac{1}{4}$  inch, or 6 mm., thick, and a piece of blue cord. It is raised by hand. When the pick is made and the heddle is dropped, the tension of the warp should be sufficient to bring down the warp threads 1, 3, 5, 7, etc., into the same plane as the warp threads 2, 4, 6, 8, etc., but owing to the want of rigidity in the beams already referred to, this only takes place in a very modified manner, and a raiser or picker-up, Fig. 96, for the warps 2, 4, 6, 8, has to be brought into use. It consists of a thin rod of wrought iron (not wire) hafted into a suitably shaped piece of wood. The spool, 31 $\frac{1}{2}$  inches, or 80 cm., long, belongs to type A a 1.



FIG. 91C TAPESTRY FRAME FROM MS. CODERBY  
RABANUS MAURUS, IX CENT. (AFTER ASCOLE,  
ENCYCLOP. BRIT. 19TH ED.)

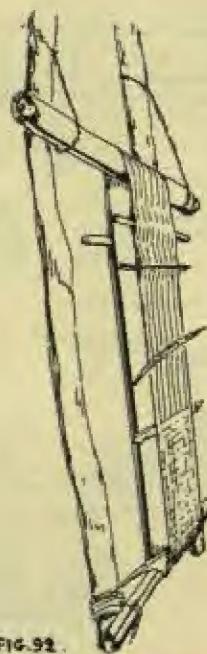


FIG. 92  
ILORIN WOMAN'S LOOM (APPROXIMATE REPRODUCTION) FROM BINIUS' VOICE OF AFRICA.  
SIDE VIEW

The weft is generally stouter than the warp, which is laid alternately in varying breadths of brown and white which gives the striped pattern. The temple consists of two flat thin pieces of cane rind  $\frac{1}{8}$  inch, or 1.6 cm., wide, Fig. 97, both ends of both pieces tapering to a point.

In the looms of this class from Opobo (Manchester, Salford, Liverpool and Glasgow Museums), from Southern Nigeria (Imperial Institute) and from Akweta, Lower Niger (Liverpool Museum), there is brought into use a rod which is carved "herring bone" fashion on the surface, Fig. 98. Its function appears to be that of a laze rod and not that of a pattern rod : it would be of use mostly in long and broad weaving to prevent warp entanglement.

Coloured geometrical weft pattern weaving on these looms has reached a high pitch of excellence, all things considered; blue, yellow, red and white yarn being used over a blue warp and weft with generally a few inches of coloured warp at both selvedges. The pattern is woven on top of the plain web as the latter

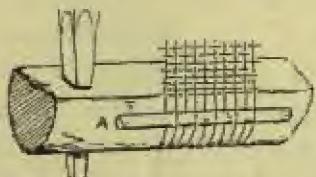


FIG. 93 BREAST BEAM. SOUTHERN NIGERIA. IMPERIAL INSTITUTE.



FIG. 96 PICKER-UP. BANFIELD MUSEUM. ABEOKUTA

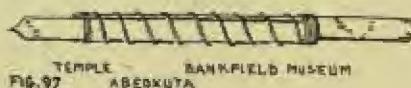
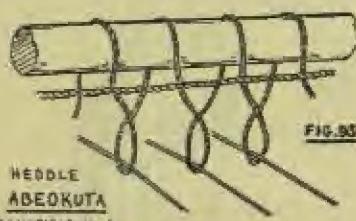


FIG. 97 TEMPLE. ABEOKUTA. BANFIELD MUSEUM



HEDDLE  
ABEOKUTA  
BANFIELD MUS.

FIG. 98

TO LAST WARP—80 NICKS 77—TO LAST WARP  
TO ROD END ← 104 NICKS 102—TO ROD END  
57 NICKS PER INCH OR 22 PER CM.  
+ 1 NICK FOR EVERY 2 WARPS  
HERRING-BONE L-ROD. SOUTHERN  
NIGERIA. IMP. INST.

FIG. 98

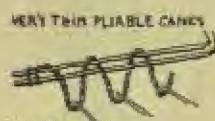


FIG. 94  
SOUTHERN NIGERIA, IMPINST.  
TYPE OF HEDDLE IN USE  
WITH WEST AFRICAN VER-  
TICAL COTTON LOOMS

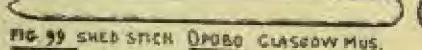
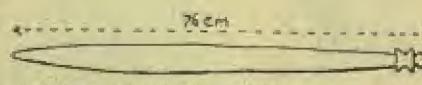


FIG. 99 SHED STICK. OPONO. GLASGOW MUS.



4CM BROAD 1CM THICK BEATER-IN  
SOUTHERN NIGERIA. IMP. INST.

FIG. 100

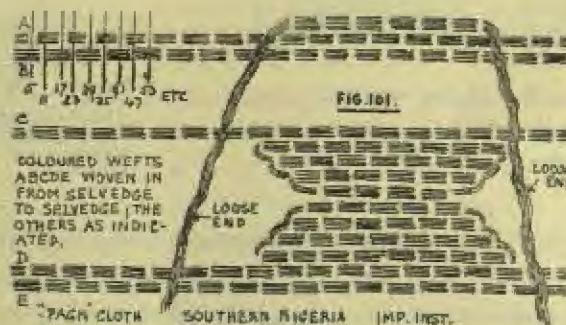
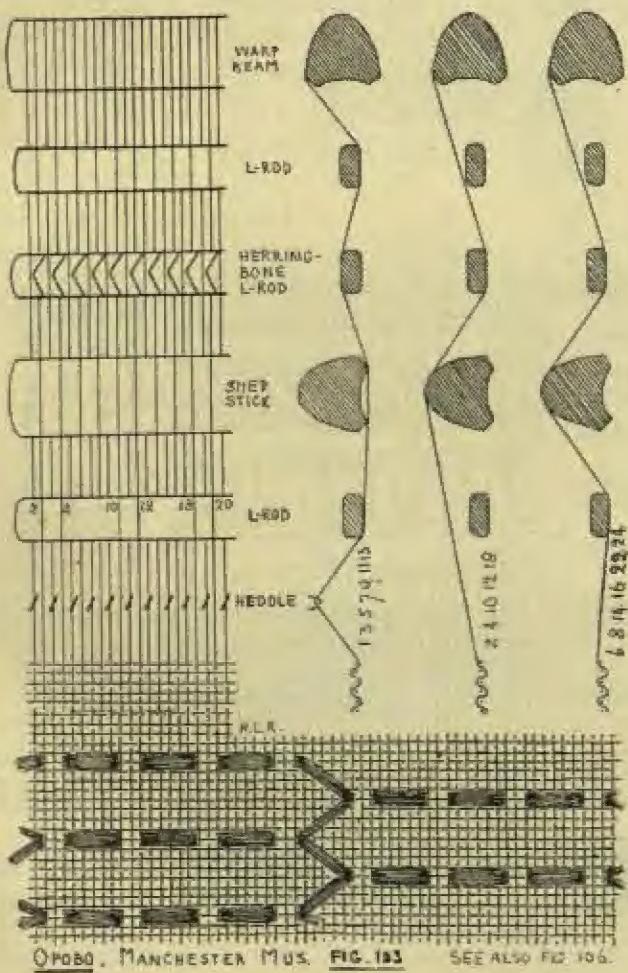
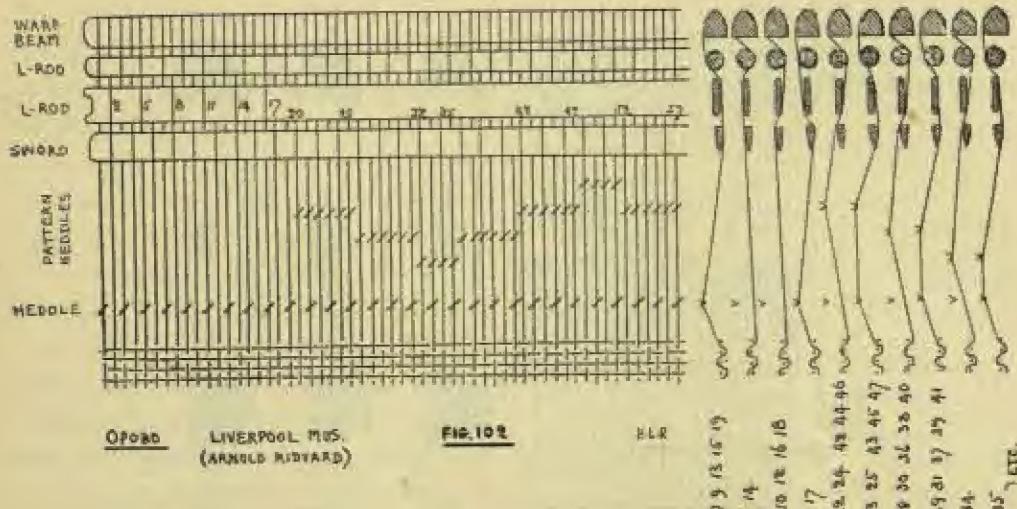
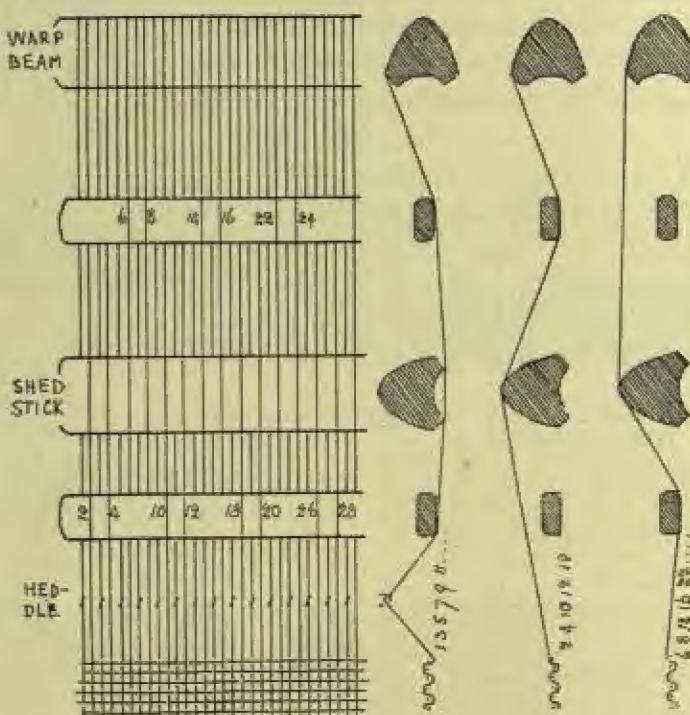


FIG. 101.  
COLOURED WEFTS  
ABCDE WOVEN IN  
FROM SELVEDGE  
TO SELVEDGE (THE  
OTHERS AS INDIC-  
ATED,  
D  
E  
—PACH CLOTH SOUTHERN NIGERIA. IMP. INST.

AN OTHER PATTERN ON SAME CLOTH AS SHOWN IN FIG. 105 AND RECO-  
LATED BY PATTERN ROD AND PATTERN HEDDLE

proceeds, and is woven right across the web or in part only as required ; if in part only the ends of the weft hang down as shown in Fig. 101 until further required. For this sort of pattern weaving the worker is guided by the special way in which the warp is laid out. Every third, fourth, sixth or twelfth warp, as the case may be, is made to pass over the pattern rod as shown in Figs. 102, 103 and 105, and



ASEOKUTA, BANKFIELD MUS.(C.PUNCH) FIG.104.

H.L.R.

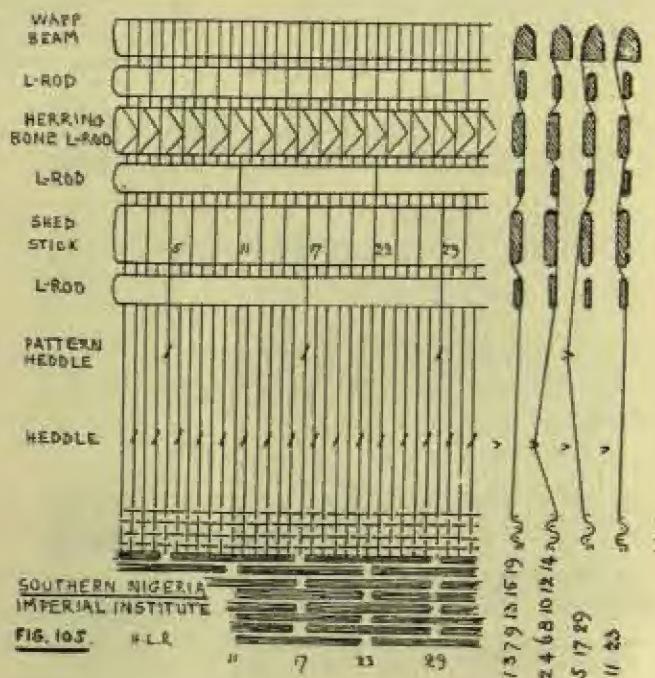
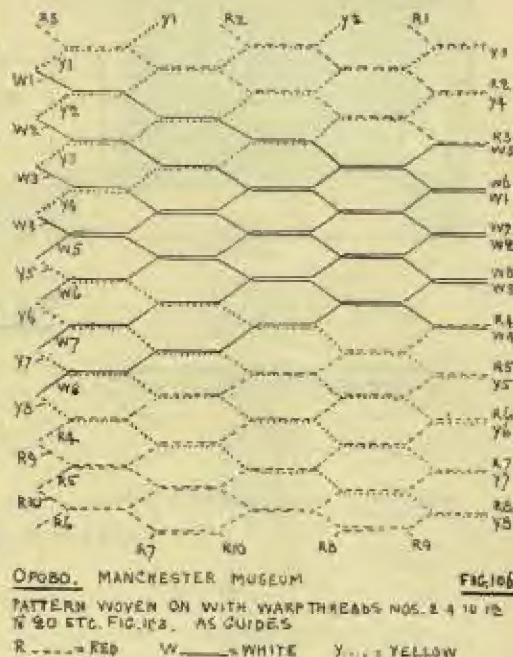
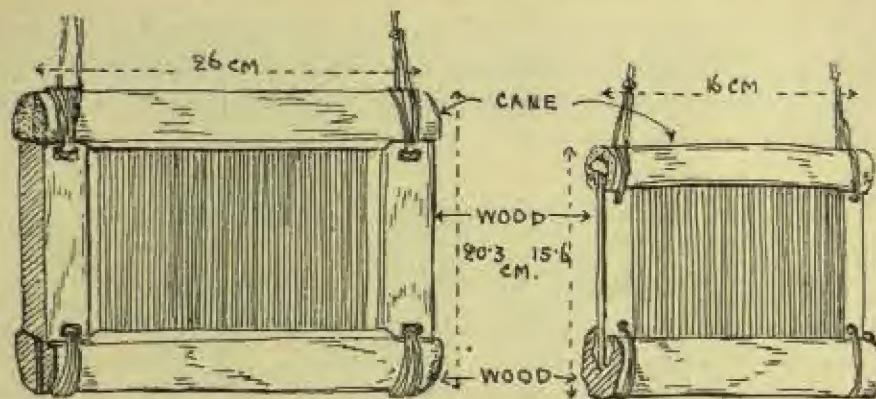
SOUTHERN NIGERIA  
IMPERIAL INSTITUTE

FIG. 105. H.L.R.

in order to ascertain at which warp the pattern weft is to be inserted or withdrawn the weaver must apparently run his finger from that warp on the pattern rod down to the web, and where that warp passes into the web he will insert or withdraw his spool as the case may be. One loom, Fig. 102, from Opobo (Liverpool Museum) is provided with four pattern heddles as well as a pattern rod.

According to Van Genep<sup>1</sup> the designs are taken from domestic objects, and he mentions particularly that one is taken from the pulley-block of a treadle loom. On the other hand Pommerol,<sup>2</sup> who no doubt had better access to the womenfolk than he could have had, speaking of an excellent old woman, says: "El Haj teaches novices the art of casting the threads of the weft [sic., should be warp.—H. L. R.] from one peg to another and arranging these threads vertically in the primitive looms, made of wood, string and reeds. She teaches them how to dye wool and how to mix the different shades of colour; but one thing she jealously guards, and that is the secret of the hieroglyphics, those mysterious and cabalistic designs, such as





REED AND SHUTTLE  
WITH OUTLET HOLE  
ABEOKUTA (C.PUNCH) 1903  
BANKFIELD MUSEUM.

FIG. 108  
REED AND SHUTTLE  
NOT PROVIDED WITH  
OUTLET HOLE.  
KWITTA (ARN.RIDYARD) 1915

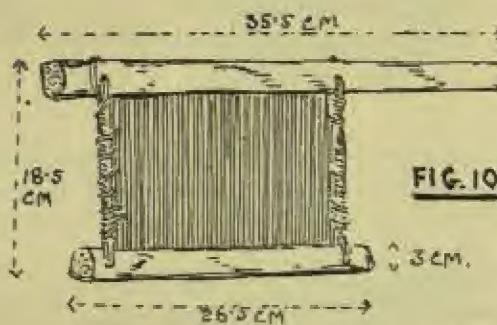


FIG. 109

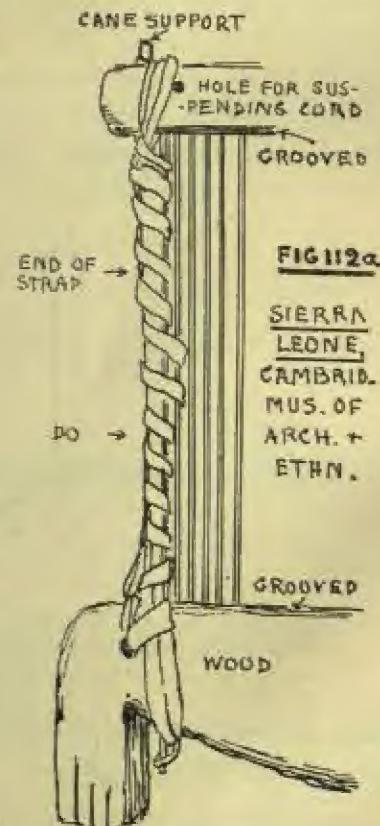
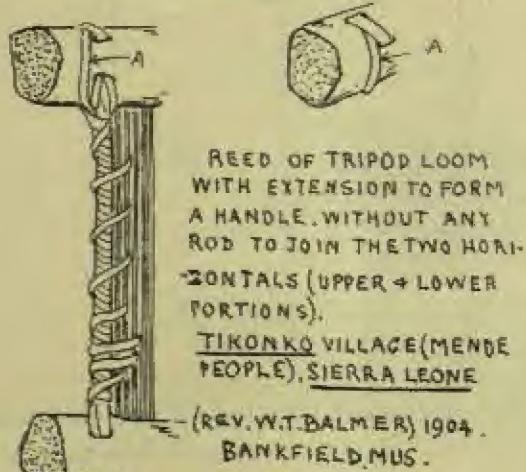


FIG. 112a  
SIERRA  
LEONE  
CAMBRID.  
MUS. OF  
ARCH. +  
ETHN.

R.L.R.

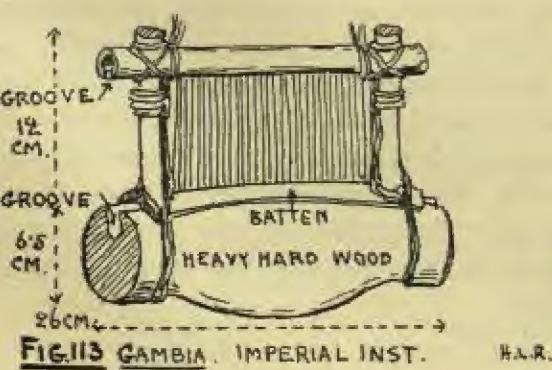
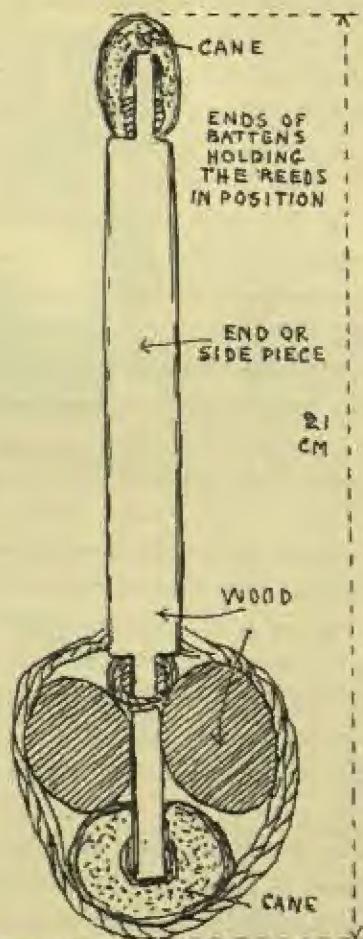
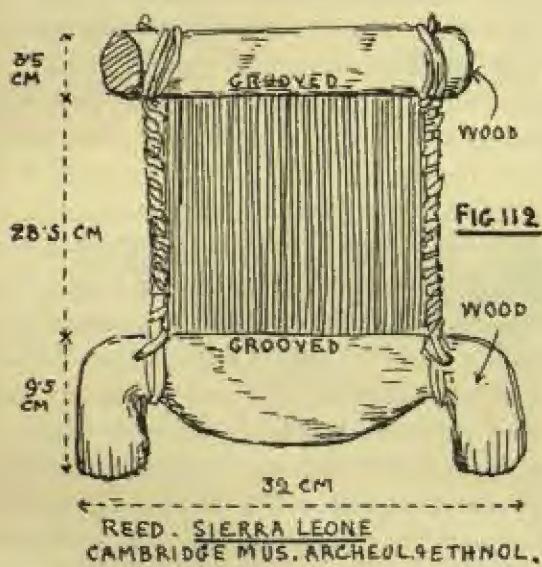
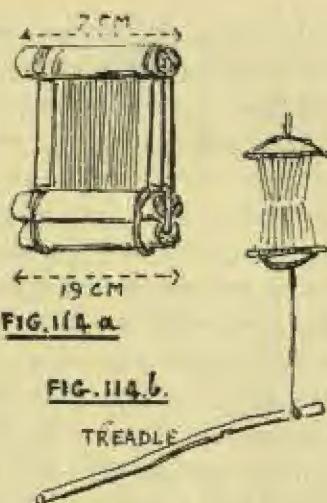
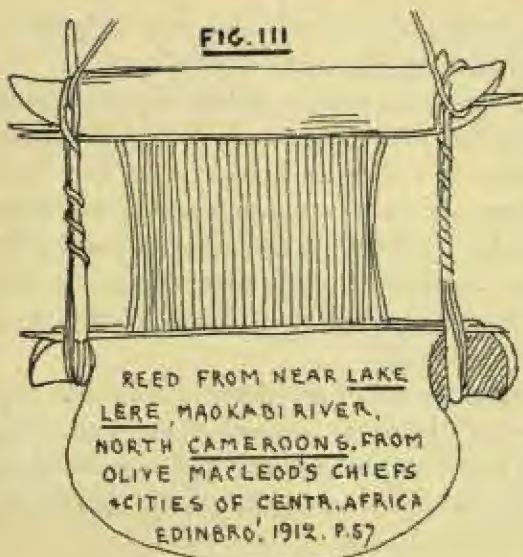


FIG. 114  
NORTHERN NIGERIA  
IMPERIAL INSTITUTE.

that grudgingly, this ancient writing, which she herself does not understand, enshrouding as it does the thoughts of races long since passed away."

The loom is used for providing a variety of articles, and is also used as a tapestry loom and so carrying us back to the Middle Ages. A. J. Cole illustrates what appears to me to be the same loom in an article on Tapestry,<sup>1</sup> Fig. 91c, from a IXth Century MS. As a tapestry loom it is the same apparatus used for making rugs in India (there is a specimen in Bankfield Museum), and as an ordinary cloth loom it is presumably the same as the Ancient Egyptian loom depicted in the tombs of Thot-nefer and Nefer-ronpet, already referred to, although in the latter one of the looms appears to be served by a woman.

Stuhlmann,<sup>2</sup> following Frobenius, proposes to call this form of loom the grip loom because the shed is made by gripping the heddle instead of the shed being made by means of treadles. The term is suitable if confined to looms in which there is really a gripping of the heddles, but cannot be applied to all non-treadle looms, for the latter include the Fixed Heddle Looms.

4. *The Horizontal Narrow Band Treadle Loom.*—The narrow band treadle loom, which is a fully developed loom supplied with reed, harness, treadles, etc., may be seen in two sub-forms as it were: (a) the one furnished with a rectangular frame on the plan of our hand looms, and (b) the other furnished with a *tripod* frame.

The first writer to give us an illustration of the rectangular frame loom was T. E. Bowditch,<sup>3</sup> who tells us: "The Ashantee loom is precisely on the same principle as the English; it is worked by strings held between the toes; the web is never more than four inches (10 cm.) broad." His illustration is reproduced here, Fig. 107, *minus* the weaver, who does not add to the clearness of it. The illustration depicts a rectangular frame consisting of four uprights, three top beams, and four lower beams; the warp extends beyond the frame and appears to be made taut to a heavy stone, acting as a sort of anchor while the cloth is rolled up on a breast beam; there are two heddles which look very much like the reed (beater-in), and in spite of his remark he does not show the string connecting the lower shafts of the heddles with the weaver's toes; it is possible that there is an indication of a shuttle. The narrow pieces of cloth (band) produced on this loom vary from 2 to 6 inches, 5 to 15 cm., in breadth. The reed, Fig. 108, is the best part of it, and generally consists of a more or less square hardwood frame 6 inches by 7 inches, 15 by 18 cm., or thereabouts; all four sides are equally thick, and when fitted together and tied up the whole is fairly rigid. The reed is also frequently made with the side pieces much lighter than the top and bottom, so that it would be too light to swing back into position after beating-in, to obviate which the bottom wood is made heavier than the top one, or other pieces of wood are fastened to it as shown in Figs. 111, 112, 113, and 114. The reed is suspended by cord and not by side battens like our sley side supports. The heddles are likewise suspended by a cord which passes over an ill-formed pulley, Fig. 119, the roller of which is

<sup>1</sup> *Encyclopaedia Britannica*, xiith ed.

<sup>2</sup> *Aures*, p. 117.

<sup>3</sup> *Mission from Cape Coast Castle to Ashantee*. 4to. London, 1819.

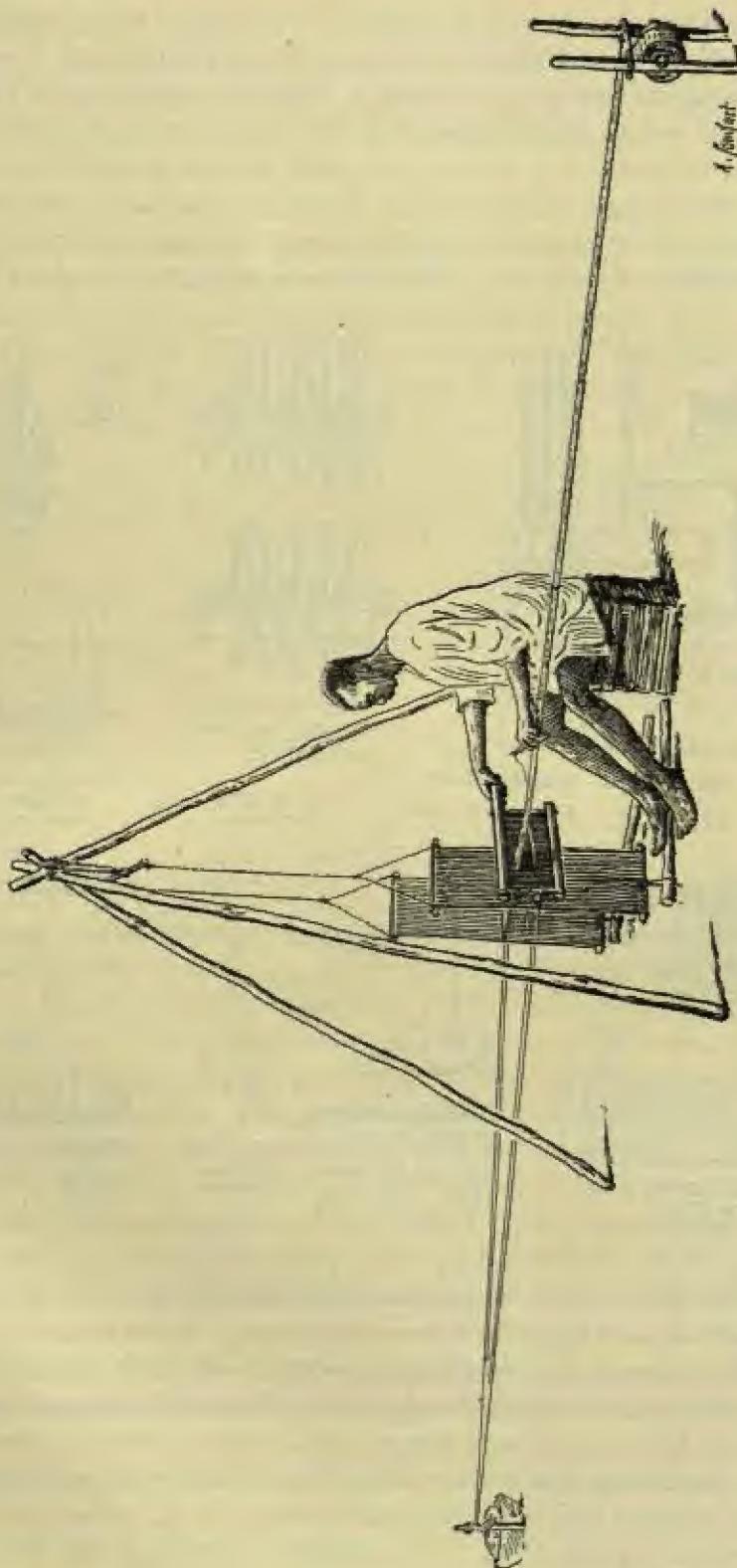


FIG. 110. HORIZONTAL NARROW BAND LOOM—TRAPO FOMI. FROM A SPECIMEN IN BANKFIELD MUSEUM FROM TIKONKO, MENDE, SIERRA LEONE (REV. W. T. BALMER, 1904). A PHOTOGRAPH.

frequently an old sewing yarn reel (or bobbin). The leashes of the heddles are mostly of twisted cotton. A shuttle is in use, and frequently it is not provided with a weft paying-out hole. The warp beam's place is taken by a heavy stone or anchor, while the breast beam consists of a thin cylindrical stick on which the cloth is wound by means of a wooden pin passed through the end, the point of which presses against the seat of the weaver to prevent unwinding. The heddles are drawn downwards by means of cords which end in a wood or bone disc or a short transverse piece of wood, which is grasped between the big and second toes of

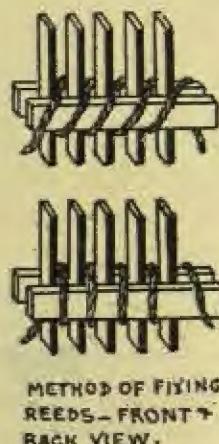
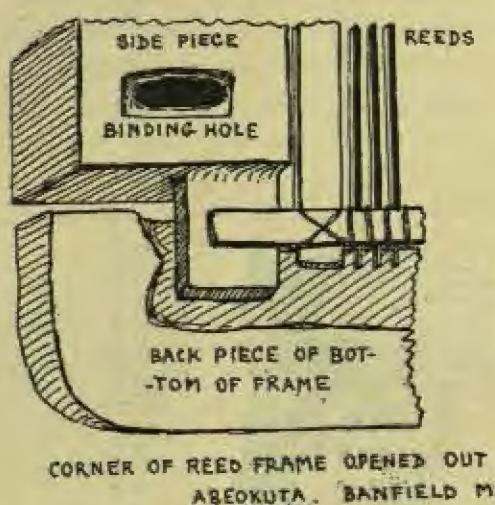
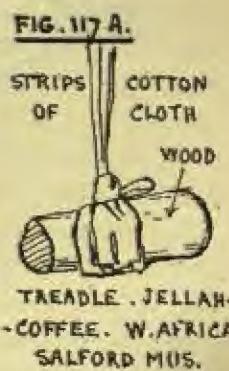
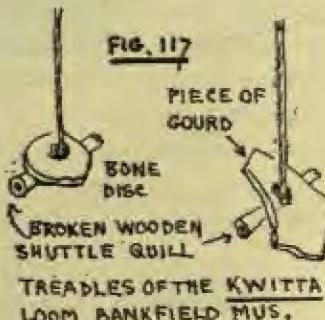
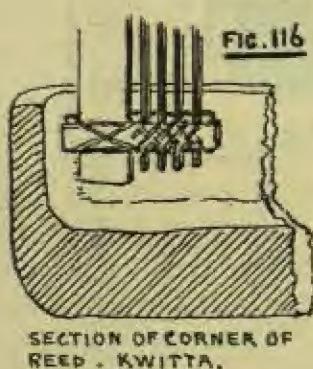


FIG. 115



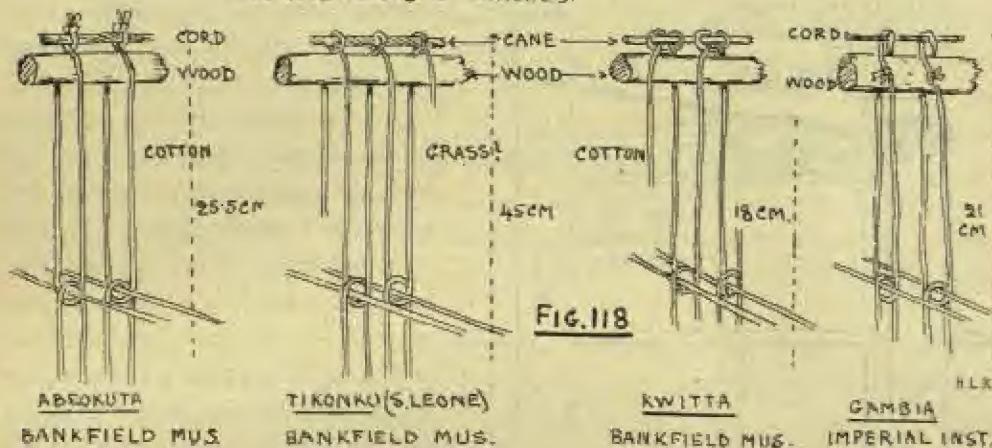
the weaver, Figs. 117, 117A, or in some cases the cord ends in a loop into which the weaver inserts his big toe. The weaver sits facing the breast beam.

The student naturally compares this loom with our own hand looms, and it has some resemblance to the broad, well-developed hand loom which is found the whole length of North Africa, inclusive of Egypt. But if the similarity be there, then also we must admit that this African loom is a very degenerate representative, judging by the complete specimens in Bankfield Museum, in the Liverpool Museum, and by the portions to be found in our museums elsewhere. The frames are

extremely flimsy, ill-fitted together, and slovenly rather than crude in their details. The frequent omission of a pay-out hole in the shuttle is very probably a sure sign of decay. On the other hand, it is doubtful if the connection making the corner of the better sort of reed in Fig. 117 can be considered anything but of very recent origin, and not by any means African.

Perhaps still more degenerate is the tripod form, Fig. 110. In this the reed and treadles are suspended from the jointing of the three poles which make up the tripod. It is further characterized by an extension of the upper portion of the reed into a handle, Fig. 109, which is grasped in the right hand of the weaver, who sits on the right-hand side of the web and not with his work straight in front of him. Why the weaver should take up such a position is not obvious, for one would

ARRANGEMENTS OF LEASHES.



think that the beatings-in by the reed would have a tendency to get away from the right angle to the warp, but I am unable to trace any such irregularity in the fabrics examined. Owing to the absence of wooden side pieces, the reed is anything but rigid. The heddles are supported from a whipple tree; the leashes are of fine twisted grass or similar filament. The cords drawing down the heddles are attached to one end of each of two sticks (the treadles), the other two ends touching the ground, which gives the sticks an oblique position. Judging by illustrations of negroes at work, the weaver does not keep his feet one on each treadle, but uses one foot alternately for both treadles. The place of the warp beam is taken by a post fixed vertically in the ground, and the yet-to-be-used warp is rolled partly round it and placed in a basket at the side. The web is wound round a horizontal stick (what would otherwise be the breast beam) placed against a pair of uprights; but I am not conversant with the details. A spool of the A1 type is used and *not* a shuttle, and, like the rectangular loom, it is tended by men weavers only.

In connection with this loom we have an interesting specimen of the Warp-Laying Frame in the Horniman Museum, Fig. 120. It consists of a frame of which the two uprights of roughly squared soft wood are connected by two

transverse flat pieces of wood, each of which is provided with a longitudinal slot. As near as possible to the middle of the frame a thin rod of wood, A, is inserted through the uprights parallel with the flats. A strip of leaf is then taken, bent at its middle over the bar, and its ends woven through the slot in the lower flat and knotted together below. A similar strip of leaf is passed through the loop of the first strip bent under the bar, its ends passed upwards, woven through the slot of the upper flat and knotted together above. This work is repeated until the frame is full of these leashes—in this frame there are 41 double leashes—whereupon the bar is removed and a separate warp thread laid through every space, between the bends in the leashes, left vacant by the bar. The two uprights are then knocked off and the two slotted flats and leashes and warps transferred to the heddle frame ready for weaving.

Length from top to bottom over all of slotted bars 12 inches, 30·5 cm., width between two posts 10 inches, 12·5 cm.

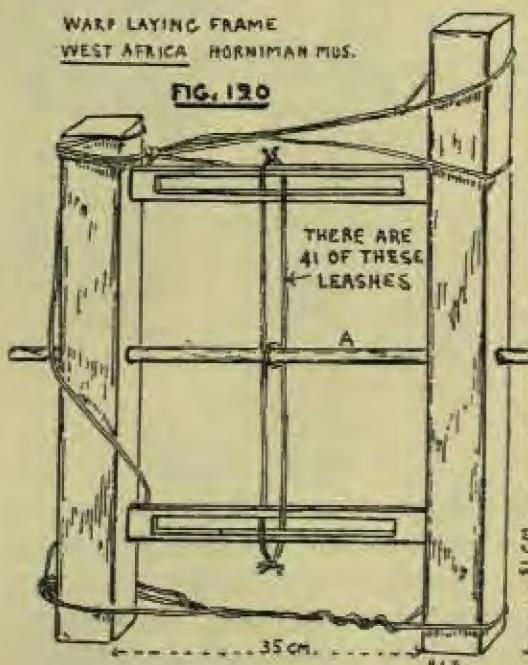
J. Büttikofer informs us<sup>1</sup> that as the weaver "proceeds with his work he pushes the *whole* of the apparatus forwards to the right, the warp not being moved at all." The immovable warp is a characteristic of some of the fixed heddle looms (see Figs. 89 and 89A), but whether the women of Neh, in the extreme eastern part of Persia near Afghanistan, move forward their tripod frame, the warp remaining in position, or whether Singalese weavers, who also use a tripod frame, do so or not, I have not been able to ascertain, but I think

the tripod must be moved forward in all cases where the warp and breast beams are pegged to the ground, and the warp is not continuous.

The tripod is found in other parts of Africa besides the West. Miss A. Breton writes me: "At Luxor, in the market, I saw [in 1909] a man weaving with a most primitive gipsy kettle contrivance—three legs like a gipsy kettle—the result was as good as could be wished." In the course of ages a similar tripod loom may have travelled across the Continent, meeting in the more western portion of West Africa with the loom which Dr. Harrison has suggested that the Portuguese possibly introduced in the sixteenth century<sup>2</sup>; the two gradually merged into each other, giving us the oblong frame with a fair reed, Fig. 108, in the more western portion

<sup>1</sup> *Reisebilder aus Liberia*, Leiden, 1890, ii, p. 283.

<sup>2</sup> *Horniman Museum Handbook*, "Domestic Arts," Part II, p. 50.



and keeping the tripod with a poorer reed, Fig. 109, in the more eastern portion, but in both cases adopting the harness for the heddles and treadles. This would account for the noticeable degenerate appearance of the looms. This view also coincides with that held by Sir H. H. Johnston,<sup>1</sup> in so far that the loom is not indigenous here, but was introduced from the East, and was primarily due to the advance of the Arabs in the ninth century A.D.

5. *The Pit Treadle Loom.*—This is the common Hindu loom at which the weaver sits on the edge of a specially constructed hole in which his feet work the treadles, and is rather a method of working a loom than a distinct form of loom. It is met with largely in the green mountains district of Oman, Arabia, half-way between India and Africa. Colonel S. B. Miles in describing it,<sup>2</sup> says: "The weaver sits and works at it in a shallow pit, with half his body below the surface." In Africa it is found among the Gallas<sup>3</sup> and contingent peoples. In Bankfield Museum we have a fringe-making loom, the gift of Mr. Wm. Myers, lecturer in the Manchester Municipal Technical School, which was obtained near Khartum by Mr. C. S. Rhodes, and in forwarding the specimen Mr. Rhodes sent a sketch showing the native weaver seated with his feet in a hole working the treadles.

6. *The Mediterranean Loom.*—I call this form the Mediterranean loom for want of a better name. It is the usual rectangular heavy framed loom with roller warp and breast beams, very similar to that of our few remaining hand weavers.

It appears to be distributed along the north coast of Africa from Algiers to Egypt, and, perhaps, somewhat up the Nile Valley, although the illustration in Dr. John Garstang's work<sup>4</sup> seems to depict a loom of a different type. Neither, however, has the warp bunched together over the head of the weaver and weighted behind him, as is the case in Syria.<sup>5</sup>

Like the pit treadle loom, it cannot in any way be considered African.

7. "*Carton*" Weaving.—This method of obtaining bands, girdles, sashes, etc.—i.e., more or less narrow fabrics—can, strictly speaking, hardly be called weaving. Its former use in Egypt has been so well described and illustrated in a sumptuous work<sup>6</sup> by Messrs. A. van Gennep and G. Jéquier that it need only be referred to here. In his *Études* already referred to (see p. 141) van Gennep gives the distribution of this tool as extending along the north coast of Africa from Tangiers to Tunis inclusive and on the banks of the Lower Nile.

*The Map.*—In the accompanying map, Fig 121, I have endeavoured to convey to the student some idea as to the distribution of the various forms of looms found

<sup>1</sup> *Liberia*, London, 1906, ii, pp. 1016–18.

<sup>2</sup> *Geog. Journ.*, November, 1900, xviii, p. 475.

<sup>3</sup> F. J. Bieber, *Globus*, March 8th, 1908.

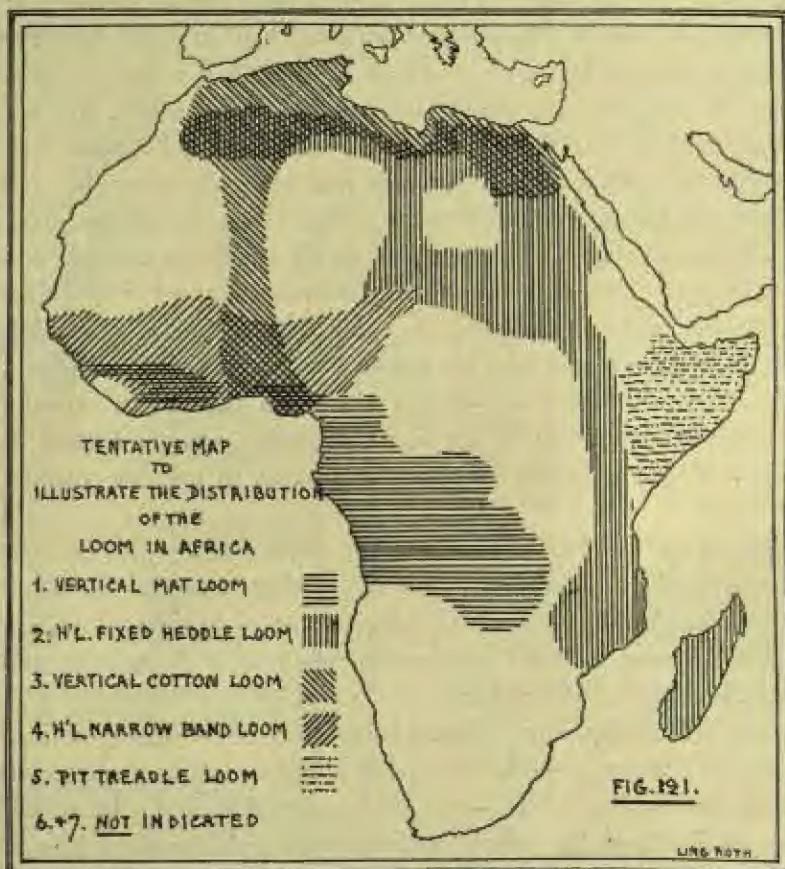
<sup>4</sup> *The Burial Customs of Ancient Egypt*, London, 1907, Fig. 133, p. 134.

<sup>5</sup> I gather this characteristic from illustrations of Syrian looms, kindly sent me by Dr. Harvey Porter, of the American Baptist Mission, Beirut.

<sup>6</sup> *Le Tissage aux Cartons et son utilisation décorative dans l'Egypte Ancienne*, Neuchâtel, Suisse, 1916.

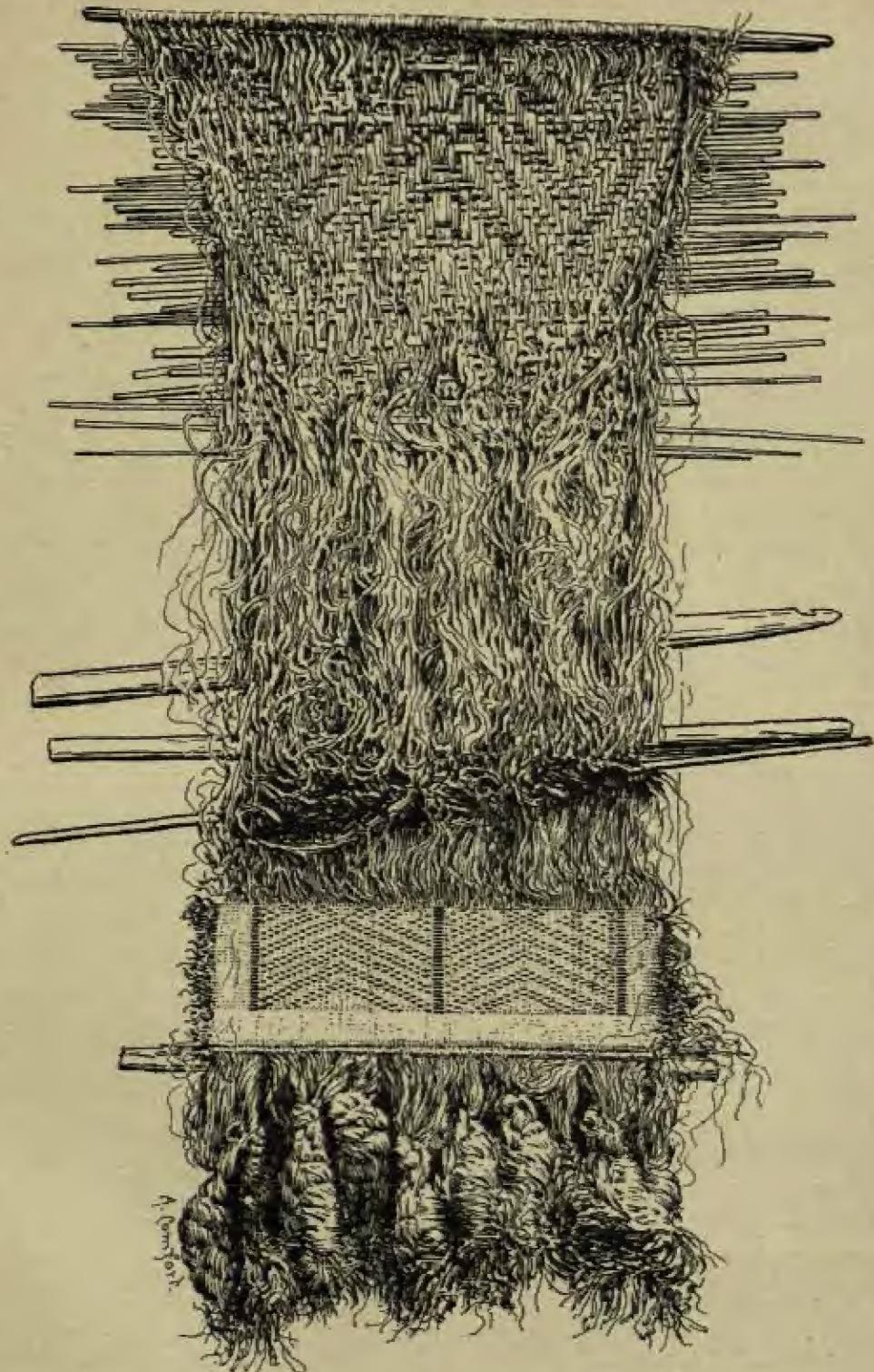
in Africa at the present day. The attempt must be regarded as strictly tentative only, for while the main positions are, I think, fairly correctly placed, details of the extension of each individual form are still lacking.

With the exception of the vertical mat loom, which may possibly be indigenous to the heart of Africa, but about which we have not sufficient evidence to decide at present, and of the vertical cotton loom, which may have had its birth



in Egypt, all the other five forms are introduced. The fixed heddle loom appears to have entered Africa both in the north-east *via* Arabia and in the south-east *via* Madagascar. The horizontal narrow band treadle loom came possibly from Portugal, and the pit treadle loom was probably imported from India *via* Arabia. The Mediterranean or Asiatic treadle loom and the "carton" loom probably found their way in *via* the Mediterranean, if the latter was not indigenous to Egypt.

[Part III, "Indonesian Looms," to follow.]



OKALE (SA-HAMUA) LOOM. BRITISH MUSEUM (E. TORDAY).

STUDIES IN PRIMITIVE LOOMS.



NOTES ON SOME BELIEFS AND CUSTOMS OF THE "ORANG DUSUN"  
OF BRITISH NORTH BORNEO.

By IVOR H. N. EVANS, B.A.

[WITH PLATE II.]

THE following notes on the customs and beliefs of the so-called "Orang Dusun" of British North Borneo were made during the months of July and August, 1915. They are supplementary to some observations of mine already published in this *Journal* in 1912, and I deal with exactly the same parts of the country as before—namely, the Tempassuk district and the villages immediately surrounding the Government post at Tuaran. The upland villages of the Tuaran valley I have never visited, though I have met many of their inhabitants. The natives who occupy the hinterland of the coast between the mouth of the Tuaran River and Jesselton are absolutely unknown to me.

"Orang Dusun," which, literally translated, means "people of the orchards," is a name which was originally used by the Malays to denote large sections of the Indonesian population of British North Borneo, living chiefly in the interior and the country behind the coastal regions, whom they considered to be of rather similar habits and culture. The term is loose, but useful, and has consequently been adopted by Europeans; for this reason I also retain it. In those parts of the country which I know, it cannot be said that the Dusuns have any tribal organization, the village community being the unit. In the Tempassuk District the Dusuns style themselves *Tindal*, while I believe that natives of the Upper Tuaran River do the same. Around Tuaran Settlement, however, the Dusuns seem to prefer to call themselves *Song* (or *Suong*) *Latud* (people of the country (?), i.e., the developed country as opposed to the jungle). These Tuaran villagers differ considerably in their customs from the Tempassuk natives.

Before I deal with any fresh material, I should like to correct and amplify certain observations in my former paper. There I stated that the annual rites performed at Tuaran in connection with the sacred jars were termed *Mengahow*, and those for driving out the evil spirits *Mobog*.<sup>1</sup> I described a ceremony, which appeared to be *Mobog*, but appended a note to the effect that, owing to a conflict of evidence—I had practically no opportunity of making further enquiries—I could not definitely state that it was so.

I have now been able to reconcile what appeared to be the opposing statements of my two informants. It appears that the *Mengahow* rites frequently begin

<sup>1</sup> *Mobog*, a Dusun told me, means "to beat," the name being given because a pig is beaten by the celebrants.

two or three days before *Mobog*, and thus the two ceremonies more or less run into one another. The performances which I witnessed were, I believed, part of those enacted for the purpose of driving out evil influences or spirits.

I have mentioned previously the reverence with which the Tempassuk Dusuns regard the *Limpada* (or *Lempada*) tree. Having rather forgotten its appearance, and wishing to refresh my memory, when recently coming down from up-country with my old friend Gumpus, the headman of Tambatuan, I asked him to draw my attention to a specimen if we should pass one. He did so, and, naturally enough, I stopped for a minute to look at it, though I did not go near it, owing to my respect for Gumpus's prejudices. He immediately exclaimed: "Don't stop! don't stop, Tuan! I can't bear the sight of it! There is a spirit in that tree!" at the same time turning away his face and scowling hideously. Sirinan of Piasan, another old friend of mine, tells me that the sap of the tree is used as a medicine for treating some diseases, but when this is to be collected the proper name of the tree must not be mentioned, but it must be called *gugutakan*.

The word *menghadji*,<sup>1</sup> which occurs frequently in my former paper, is used by the Dusuns, when speaking Malay, to mean the performance of a religious ceremony; strictly translated it means "to learn the Koran," but it is frequently used in the Malay Peninsula with the sense of learning at school. As Malay scholars learn both the Koran (and other lessons) by reciting them aloud, the Dusuns have adopted the word in the sense of chanting any religious formula. Among themselves the up-country Tempassuk Dusuns seem to use the word *Menuriuait* in that sense.

During my trip to Borneo I stayed for about ten days in Gumpus's village (Tambatuan), which is situated not far from the base of Mount Nunkok; and here, chiefly from Gumpus himself, I was able to gather a good deal of additional information with regard to the religious festivals and ideas of the up-country Dusuns. I give below the names of those festivals that he mentioned, and all the details about them which I obtained.

1. At the festival for the taking of the rice-soul (*membaraian*) the ceremony is performed by a woman before reaping begins, the soul consisting of seven ears of padi. When the rice-soul has been cut, general reaping starts and continues till the end of the day. On the second day work is tabued, but on the third is again resumed, and is then carried on until the whole crop has been reaped. The first day is called *Temimpun*; the second day, when no work must be done, *Tomingkud*, the third *Sumauk*, the fourth *Sumagang*. Another name for *Temimpun* was given to me, *Ka-in-gonom* (or *Ka-in-onom*) *Ka-silau*, which means, I believe, the sixth day of the new moon.<sup>2</sup> Hence the *membaraian* ceremony would seem to begin on the second day of the month. The rice-soul, with offerings of cotton and leaves, is hung up in a hut on, or near, the padi-field, while there is a

<sup>1</sup> Or, better, *menghaji*.

<sup>2</sup> See calendar on p. 155.

religious ceremony on the first day (*Temimpun*), but no sacrifice is made. When reaping is finished the *membaraian* is taken to the owner's house; a religious ceremony, called *Sumalud*, is performed there; a fowl is killed, cooked, and eaten, and rice-wine is drunk. The rice-soul is finally hung up in the padi store.

4. *Kokatuan* is another festival, which, Gumpus told me, is celebrated about a month after the taking of the *membaraian*. There is then a religious ceremony carried out by women; a buffalo (or buffaloes) and pigs are killed, and large quantities of rice-wine drunk.
5. *Maginakan* (the big eating) is a festival which is only celebrated if the padi crop has been plentiful. It takes place eighteen days after *Kokatuan*. There is a religious ceremony performed by the women, and feasting is indulged in.
6. A festival called *Mengahow*, according to Gumpus, is observed on the fourth day after *Maginakan*, when there is feasting, but apparently no religious rites are performed. This does not take place, it seems, at the same time of the year as the *Mengahow* of the Tuaran Dusuns, and has nothing to do with sacred *Gusi* jars, since the Tambatuan people do not indulge in such luxuries, though its purpose (according to Gumpus, to bring good luck) seems to be the same.

The Tambatuan Dusuns have a ceremony called *Mengemahow*, or "brushing," which they perform in order to rid the houses of the spirits of disease. The men brush down all the walls of the house (I understand the inner walls) with bunches of flowers and bamboo leaves, the latter being of a kind called *Tenemong*.

Another ceremony, which is celebrated in connexion with the preparation of wet padi land, is called *Maulud*. A fowl is sacrificed to the earth-spirit and an offering of rice made. The larger feathers of the fowl are tied together to form an ornament, which is bound to the top of a bamboo stick set up in the fields. Two or three of these ornaments, each on the land of a different owner, were to be seen in the wet padi lands in the valley below Tambatuan at the time of my stay. The ceremony takes place before the grass and weeds are cleared away.<sup>1</sup> Gumpus also referred to the ceremony as *Menjoget*.<sup>2</sup>

There appears to be some ceremony for avoiding the bad luck attaching to evil dreams, as Gumpus told me that a youth named Sembawan was so called because his mother gave birth to him shortly after she had finished a *menghaji* called *Membaican*, which she performed with the above object.

While I was at Tambatuan, Gumpus took me on several occasions into his rice-store, where were hanging up the rice-souls of former crops; for, contrary to the custom of many peoples who take the rice-soul, it appears that the Dusuns do not mix it with the seed for the next sowing. Some of the bunches of rice-souls (those of several years were gathered up into one bunch) had large sea-shells and small

<sup>1</sup> No plough is used by the up-country Dusuns in preparing wet padi fields.

<sup>2</sup> The *joget* of the Peninsular Malays is a kind of dance.

bamboo tubes tied to them, these being receptacles for offerings. In one case a bundle had two large marine shells and a bamboo tube attached to it, the former being intended to hold rice and sireh leaves respectively, and the latter an offering of rice-wine. The rice-souls were hung from the rafters above the big tree-bark bins containing stored padi. In a small chamber at the end of the building, which had no opening into it from the larger room, was a small store, entered by a door from outside. Here there were a couple of bins of padi from the last crop, while on the top of the grain in one of them—that from which the daily rice was being taken—was a small brass pipkin containing some padi. With regard to this, Gumpus told me that, when rice is first taken from a bin for eating, a handful or so is set aside in this manner as the rice-soul's share (*baghian membrarian* were the Malay words that he used). He also said that when the bin was finished the rice-soul's share was moved on to the next.

Against the wall of one rice-store, on the outside, I saw a couple of human skulls hanging; these seemed to be placed there partly with the idea of protecting the padi against thieves. They were both very old and covered with cobwebs, so, as I wished to photograph them, I tried to get somebody to clean them for me, thinking that the Dusuns might not like me to do it myself. Nobody, however, seemed willing, Gumpus telling me that they might only be touched by someone who had taken a head, or at any rate been in some war. Eventually a policeman, whom I had with me, volunteered to do the cleaning, as he had seen a little active service. I made two or three attempts to photograph the heads without getting a good result, and Gumpus immediately concluded that they did not like their portraits being taken. I told him that I would have one more try, and then, if I was not successful, I would admit that he was right. Luckily, however, this last trial yielded me quite a fair picture.

A rather curious custom with regard to the clearing of jungle for padi planting seems to be observed in some villages. I noticed that in one of the fields on the hill-side near Tambatuan, a single tree was left right in the middle of the clearing. Guessing that this was not preserved without some good reason (according to native ideas), I made inquiry, and was told that it was customary to leave a single tree standing "lest the birds, having no perching place left to them, should curse the crop." A similar custom obtains among some of the Dyak tribes of Sarawak, where, I believe, it is said that the tree is left as a refuge for the spirits of the jungle which has been felled.

A method of divination is resorted to by the Dusuns of Tambatuan and other villages somewhat similar to that formerly, and perhaps still, used by the Sakai of the Ulu Kampar in the Federated Malay States, for the purpose of finding out whether a certain piece of jungle-land will be unlucky to clear, or whether it will give them a good yield. Seven leaves of the *Mandahasi* tree are placed under a stone in the centre of a piece of ground about six feet square, which has previously been swept of rubbish, and the ends of the leaves trimmed off evenly. The man who wishes to make the clearing then says to the earth-spirit, "If I shall

die while using this clearing let the spirit pull out one of these leaves." The next morning he comes to examine the leaves, and if they have remained undisturbed, he considers it allowable to fell the jungle, but should one leaf project beyond the others he takes it as an evil omen. Then, selecting another piece of land, he again goes through the same performance. If on the morning that he visits the leaves he finds that a twig or leaf has fallen into the cleared space, or if a hole has appeared in the ground, he takes this too as an evil portent.

In my former paper on the Tempassuk Dusuns I gave a calendar of the days of the month, obtained at Kampong Tengkurus, which shewed the day-names and their meanings. Gumpus has now given me the calendar in use at Tambatuan, which, though very similar, I include for the purposes of comparison, together with remarks with regard to the work allowable on the different days. I was also able during my stay in the village to observe that the Dusuns kept the tabu days fairly strictly.

1. <i>Salimpunan ka'silou</i>	...	Rest day. No work.
2. <i>Ka-in-duoh</i>	...	All kinds of work allowable.
3. <i>Ka-in-teloh</i>	...	Ditto.
4. <i>Ka-in-apat</i>	...	Ditto.
5. <i>Ka-in-limoh</i>	...	Ditto.
6. <i>Ka-in-onom</i>	...	Ditto.
7. <i>Ka-in-turoh</i>	...	Observed as a holiday by those in comfortable circumstances.
8. <i>Ka-in-walu</i>	...	All kinds of work allowable.
9. <i>Ka-in-siam</i>	...	Ditto.
10. <i>Ka-in-hopod</i>	...	Ditto.
11. <i>Ka-in-hopodomiso</i>	...	Ditto.
12. <i>Ka-in-hopodomduoh</i>	...	Ditto.
13. <i>Kopopusan</i>	...	Ditto.
14. <i>Tuwang</i>	...	Rest day. No field work, except sowing, allowable.
15. <i>Telekud</i>	...	Ditto.
16. <i>Tentong</i>	...	All kinds of work allowable.
17. <i>Rampagus</i>	...	Work on hill clearings allowed, but not work on wet-rice fields.
18. <i>Limbas</i>	...	Work allowed on wet-rice fields, but not on clearings.
19. <i>Timpun</i>	...	Rest day. No work.
20. <i>Maulat</i>	...	Rest day, but only observed by elderly married men.
21. <i>Katang</i>	...	All kinds of work allowable.
22. <i>Geok</i>	...	Rest day. No work.
23. <i>Ka-in-duoh telimah</i>	...	All kinds of work allowable.
24. <i>Ka-in-teloh telimah</i>	...	Ditto.

25.	<i>Ka-in-apat telimah</i>	... All kinds of work allowable.
26.	<i>Ka-in-limoh telimah</i>	... Ditto.
27.	<i>Kopopusan</i>	... Ditto.
28.	<i>Sukilab</i>	... Rest day. No work.
29.	<i>Tenob</i>	... Ditto.
30.	<i>Gogor</i>	... Ditto.
31.	<i>Tonibul</i>	... Ditto.

The name-meanings given for the days in the Tengkurus calendar seem, from my inquiries at Tambatuan, to be substantially correct. In my former paper I stated that I was unable to give the meaning of *Ka-in-duoh*, *Ka-in-teloh*, etc. (which I wrote *Kain duoh*), though *duoh*, *teloh* were the numerals two, three, etc. I mistook *Ka-in* for the Malay word *kain*, meaning cloth. Fr. Duxneuny, of Putatan, informs me that *Ka-in-duoh*, *Ka-in-teloh* are merely the Dusun ordinals "second," "third," etc.

It may be noted that in the Tengkurus calendar *Tonibul* is the first day of the month; while Gumpus makes it the last, with Salimpunan *Ka'silau*, which does not occur in the Tengkurus calendar, as the first. Other differences are that he leaves out *Tentelu* (given at Tengkurus) as the fourteenth day of the month, and inserts *Maulat* as the twentieth, while he gives the twenty-first as *Katong* instead of *Kompusan* (Kompusan, according to my Tengkurus informant, being followed by *Katang*, or *Kutong*).

On my arrival in Tambatuan I found that news had reached the village that some disease, perhaps dysentery, was then epidemic in Kion village, which is situated some few miles away on the lower slopes of Mount Kinabalu. For fear of this, every villager was wearing as a charm a little bit of some kind of wood tied to a string, which was bound either round the wrist or the ankle. Wishing to be in the fashion, I asked Gumpus to get me one of the charms, and he told his wife to prepare one for me. I was instructed that I must, according to custom, give a small measure of rice for the charm; so, not having any rice, I asked how much I was to give in money as its equivalent. Gumpus said, however, that money could not be received directly, so I had first to buy the rice from his wife for cash, and then hand it back to her.

Owing also to the fear of this epidemic, wooden models of spears, about which a story will be found in the Tempassuk folk-tales previously published,<sup>1</sup> had been set up in front of several houses to prevent the entry of the spirits of disease; and near the door of one dwelling was a real spear, on the blade of which a rough figure of a man, upside down, had been drawn with lime, while a joint of bamboo containing toddy and two crossed sticks had been planted in the ground before it.

In up-country villages near much-frequented tracks, which are thus exposed to infection (disease-spirits), several groups of three or four small standing stones are often to be found outside the radius of the houses.<sup>2</sup> These stones guard

<sup>1</sup> *Journ. Roy. Anthropol. Inst.*, p. 191.

<sup>2</sup> E.g., at Koung Ulu.

the approaches to the village, and protect its inhabitants against the spirits of disease.

As among the Dyaks, it is forbidden to make any kind of loud noise when there is sickness in the country, and while I was at Tambatuan, Gumpus reprimanded some of the villagers for beating gongs.

One day, when I was questioning him as to how the Dusuns chose names for their children, he said to me, " You know, Tuan, my name used to be Logus, but it was a very dirty name, so I changed it to Gumpus." Wondering what he meant, and thinking that Logus had perhaps an indecent meaning, I asked him why he said that Logus was a dirty name. " Oh," he replied, " while I used that name I was always ill and could not get down to the river to bathe, so I changed my name to Gumpus, and then I got well."

Names seem to be occasionally given from some event which happened at the time of birth: for instance, one youth in the village was called Kambadi because he was born on a day of market, *badi* (Dusun).

Among the Piasau Dusuns a priestess or female shaman is called *berberlian*; a male shaman, *sunduk*.

A rather peculiar method of divination is in favour in up-country villages of the Tempassuk district, and is resorted to for purposes of discovering a thief or of ascertaining whether the omens are favourable before undertaking a journey or any other enterprise. The instrument used in divining is a piece of bamboo, sometimes shaped like a working knife (Pl. II, Figs. 1 and 2), to the end of which are attached several short strings, on which are threaded numbers of little pieces of the root of a plant called *Kamburonga*.<sup>1</sup> The plant is, it seems, favoured by some kind of spirit, and in divining by this method, a woman holds the end of the bamboo handle in her left hand and places the point of the index finger of the right on the back of the handle near its proximal end, a mark of some kind having been previously made near the distal end of the stick. Supposing that she is trying to detect a thief, she then says to the *Kamburonga* spirit, " If so-and-so is guilty, draw my finger along this handle." If the man whose name she mentions is not the culprit, her finger remains immovable on the spot where she first placed it, or, if she applies great pressure, doubles backwards or shoots off the handle to one side or the other. Providing this happens, she mentions in succession the name of any other person against whom there is suspicion, the same thing happening every time, until she comes to the name of the thief. When this is mentioned her finger passes easily along the stick to the mark which has been made on it a little on the near side of the *Kamburonga* roots. The ceremony of calling the *Kamburonga* spirit is called *Semungu*.

At Tuaran *Kamburonga*, obtained from up-country Dusuns, is hung against doors of houses when there is any sickness about, or, if it is unobtainable, ashes from the fire are thrown out of the door, which are also supposed to keep away spirits of disease. My Tuaran Dusun informant, Omboi, further told me that the plant is

<sup>1</sup> This plant grows in abundance close to Koung Ulu village.

also used for treating headache or pains in the eyes, being applied to the part affected.

As it was my intention on leaving Tambatuan to proceed a little further up country before returning to the coast, I suggested to Gumpus that he should get a Dusun woman to ascertain by some method of divining whether I should have an easy and successful journey; and after some trouble he persuaded an old crone to try our luck for us for a fee of three *gantang* or measures of rice. Her audience having formed themselves into a circle, she stepped out into the middle of the cleared space, her head being covered with one of the blue cloth hoods worn by Dusun women. I give my notes of the performance just as I jotted them down at the time.

"She starts singing in a quavery voice, then begins to quiver and shake as if convulsed with fever—pants—sings loudly—makes hysterical noises—moves her feet—jumps about with both feet together, first backwards, then forwards—stamps about—sings—talks in an hysterical voice—pants—calls, 'Adohi! Adohi!'<sup>1</sup>—runs round and round—goes on all fours—sits—pants—sings—stands up—trembles—sings—jumps about with both feet together and does a few dance steps."

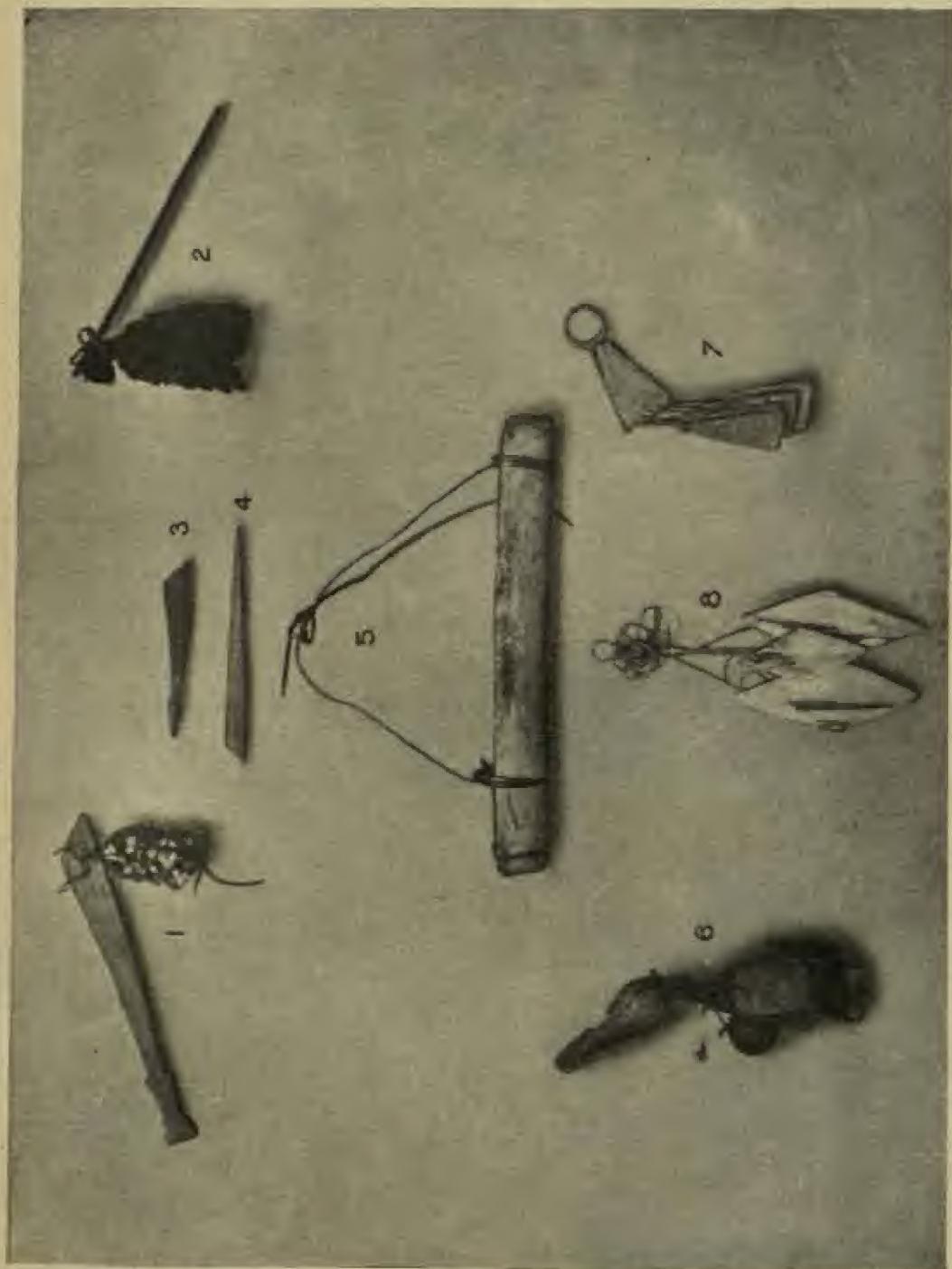
This sort of thing went on for some time, till the woman finally tumbled down and pulled the cloth off her head. On Gumpus asking her whether we should meet with any troubles on our journey, she said that we might go in safety, as she had driven away all the spirits of disease. Some of her exclamations towards the end of the performance seemed to amuse the audience highly, and on questioning Gumpus he told me in Malay what she had called out. Her remarks were all highly indecent.

With regard to the *Singkalaki*, seemingly a kind of goblin, who makes his appearance in one of the folk-tales already published, I gathered a few fresh details from Gimbad of Kampong Tempassuk. He told me that when a man picks up another person's child he will sometimes dance it on his knee, saying, "Dance, dance, child of the *Singkalaki*, child of *Geryalohan*, short short legs, long long beard, no teeth yet." Then everyone laughs.

When a child who is not yet able to talk crows and laughs to itself, people say that the *Singkalaki* is amusing it.

A peculiar belief, which is found both among some of the aborigines and among the Malays of the Peninsula, is also held by the Dusuns, namely, that it is particularly unlucky for anybody to go out into the jungle or start on a journey with an unsatisfied craving of any kind. For instance, should a man hurt his foot, fall ill, be stung by a scorpion, or meet with any other misfortune, and then remember that he had wished to chew sireh before leaving the house, but had omitted to do so, he would immediately put down his ill-luck to his not having satisfied his want. The Malay word used in connexion with this belief is *kempunan* (*kopokunan* of the Dusuns). It is difficult to translate it properly, and the dictionary is not very helpful, but *krna kempunan* in Malay seems to mean "to get into trouble through going out with an unsatisfied craving."

<sup>1</sup> May be translated, "Oh dear! Oh dear!"



CEREMONIAL OBJECTS FROM TAMATCAN, TEMPABLIK DISTRICT.

NOTES ON SOME BELIEFS AND CUSTOMS OF THE "OLANG TUSUT" OF BRITISH NORTH BORNEO.



## TUARAN DEATH CUSTOMS.

From Omboi and from Tinggi, another Tuaran Dusun, I obtained some rather interesting details with regard to the way in which corpses are protected against evil spirits. Three spirits seem to be feared as body-snatchers. One, the *Koma-kadong* (comparable to the Penanggalan of the Malays), is a flying head with long hair and a trailing stomach instead of a body. A second, the *Balan-balau*, looks like a man, while a third, the *Tandahow*, has a birdlike body. The last comes down from the clouds, and when it seizes a body, carries it off into the centre of the sea, and there cuts it up into little pieces, which it throws into the water. These become fish, which the *Tandahow* eats.

To protect a body from these spirits, two working knives are placed under the mat on which it lies, with their points projecting downwards through the floor of the house; while a spear is placed upright near the body, its butt resting on the floor and its point sticking into the sloping thatch of the roof. A fire is also lit, usually near the mat on which the body lies. If a bad thunderstorm comes on while a corpse is awaiting burial, a fire is lighted on the ground under the house.

Omboi told me that the bodies of well-to-do natives are sometimes kept sealed up in burial jars for a month before interment. Those of the poor are buried on the day of death, or on that succeeding, either rolled in mats or in rough wooden coffins.

## TUARAN MARRIAGE CUSTOMS.

At Tuaran, according to my informants, though there is a feast, there is usually very little marriage ceremony, except when the children of rich natives marry. In the case of a well-to-do couple there is some sort of incantation performed by a priestess, and the sign of the actual marriage is the eating by the bride and the bridegroom of seven handfuls of rice from the same plate. The plate is placed between the pair, who sit opposite to one another. The man first takes a little rice, and a woman in attendance then turns that part of the plate to the bride, who takes rice in her turn. This is repeated seven times, and the ceremony is gone through both at the house of the woman's relations and at that of the man's.

## DESCRIPTION OF PLATE II.

## CEREMONIAL OBJECTS FROM TAMBATUAN, TEMPASSUK DISTRICT, BRITISH NORTH BORNEO.

- 1 and 2.—Kamburonga sticks (used in divination).
- 3 and 4.—Bamboo knives with which the rice-soul is cut.
- 5.—Bamboo trough, in which the *membarnian* or rice-soul is hung up, as long as it remains in the watching hut near the padi field.
- 6 and 7.—Rattles (*gunding*) used by women at religious ceremonies.
- 8.—Charms which are hung up outside houses to keep away spirits of disease.

## SOME IBO BURIAL CUSTOMS.

By N. W. THOMAS.

[WITH PLATES III-VI]

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## GLOSSARY.

abwala, tutelary image, the same as ainyañwu.

ada (ebo, etc.), head woman.

ajago, (1) deserted house; (2) farm bush used for burial in which are thrown corpses, lepers, etc.

ajagija, one of the titles at Awka (*Report*, I).

ajana, place where sacrifices are offered to the earth.

ajoifia, "bad bush."

akbo, cotton tree, planted for ceremonial purposes.

alo, ceremonial staff.

alose, demigod, object of cult (*Report*, I, 26 etc.).

amaññulu, an Awka title.

ana, the earth.

anase, head wife.

aziza, twisted fibre worn round red cap of eze.

éi, (1) a person, dead or alive, believed to be reincarnated (*Report*, IV, 18 etc.);  
(2) a tutelary image; (3) a title.

Cuku, the supreme god.

- ébo, quarter of a town.  
 ébwo, *Neuboldia laevis*, Seem.  
 eéíchili, *Erythrina* species.  
 Egúgú, a masked man (originally a Yoruba custom) who appears at burials.  
 éku, one of the Awka titles.  
 ékwélenku, sacrifice to mwó.  
 énaku, striking swords together.  
 eze, " king," one of the titles.  
 ezana, priest of the ana (ground).  
 éziobulu, part of a house.  
 ibenabó, cloth of two breadths.  
 ibenato, cloth of three breadths.  
 iéi, marks cut on the face.  
 idébwe, daughter kept at home and not married in the ordinary way by purchase ; her children inherit from her father.  
 ifejioko, object used in yam ceremonies (*Report*, IV, 31).  
 idumu, subquarter of a town.  
 ikei, plural of okei ; old men.  
 ikéngá, a tutelary deity.  
 ikpala, plural of okpala (q.v.).  
 Irokute, isokute, the " king's slave " (*Report*, IV, 163).  
 isébe aka ono, drawing a chalk line from the grave used in second burial as far as the house.  
 isimwó, head wife.  
 itokwélegwe, young men liable to be called out for work.  
 itunne, (1) rubbing the grave ; (2) a payment by a son-in-law.  
 Iyase, one of the dignitaries (*Report*, IV, 40).  
 izu, week of four days.  
 maun, a masked man.  
 mbu, a kind of tree.  
 mbuazu, a large dried fish.  
 mbwidi, a hollow made under the ukbo (q.v.).  
 mbolong, open space near the house.  
 mpata, round box of iroko, used as a seat.  
 mpe, a small loin cloth.  
 mwada, women of the family.  
 mwó, dead ancestors.  
 ndiéie, old people, ancestors, ancestral emblems.  
 ntoto, a " rope of yams."  
 nzu, chalk ; in mbanzu a man rubs himself with chalk.  
 ñgugu, 780 cowries, 3d.  
 nkpaló, one of the titles.  
 nkpesé, the lowest title at Asaba.

- ñkpuluči, the same as či (2).
- obimwō, heap of stones made by an orhene.
- obobwo, a kind of soup.
- obu, the Awka house corresponding to ogwa, men's house.
- obwēle, head of the ikpala.
- obwo, a frame used in second burial.
- obwō, a model canoe (*Report*, IV, 45).
- qbwo, a "company" of men.
- qbwoñuke. See uke (1, 3).
- obn, one of the titles.
- oñcūuaja, sticks planted before a house at the annual sacrifice to the mwo.
- Odogu, one of the dignitaries.
- ofo, ceremonial object (*Report*, I, 43).
- oga, divider, headman.
- oglisi, the same as ebwo.
- ogwa, "front house," an open building in front of the house proper.
- oji, iroko, *Chlorophora excelsa*.
- okba, a kind of tree.
- okbensi, ancestral image (Awka).
- okbosilo, an image like ikeňga.
- okei, the oldest man, senior.
- oko, 140 cowries, about  $\frac{1}{2}$ d.
- okonti, a title.
- okpa ikeňga, cock sacrificed to the ikeňga.
- okpala, (1) headman; (2) one of the titles.
- okpukpe, gate in the fence.
- okule, store house.
- okwači, wooden dish for či (2).
- okwe, a kind of wood.
- okwelogwe, leader of the workers.
- omaku, head wife.
- omalegwe, plaited palm leaves set up in the street (*Report*, IV, Pl. IV).
- omu, market queen.
- omu ojuku, young leaves of ojuku palm.
- ong ogidi, widow's house.
- ongonto, widow's house.
- onotu, the body of dignitaries.
- ořai, a "shrine" associated with a doctor (dibia).
- osiosiq, a kind of seed.
- osisi, a staff.
- ososo, a kind of food.
- owēle, rubbish heap.
- oweli, the same as ososo.

- ozi ozi, soup spoon.  
 ozo, զզօ, blacksmith ; one of the titles.  
 ozu օկպալա, an unclaimed corpse.  
 ubili, a kind of tree.  
 ubwoime, a dance ornament.  
 ukbo, a raised mud seat.  
 uke, (1) ill-luck ; (2) a ceremony against ill-luck ; (3) the զբազ before a man's own.  
 ukoni, a kitchen (separate building).  
 umunna, kin, a subdivision of idumu.  
 uruci, mourning չի, an image used by a widow.  
 utiamili, a kind of mat.

THE Ibo-speaking peoples, with a portion of whom this paper deals, occupy a small area on the west bank of the lower Niger, and a much larger area on the east bank, extending as far as the Cross River from the Ibibio boundary northwards, and, at their most easterly point, beyond the northernmost point of the bight of the Cross River.

The Ibo speak a great variety of dialects, and the Eastern branches are almost unintelligible to the Western groups. Even such close neighbours as Asaba and Onitsha, only three miles apart on the banks of the Niger, differed, until recently, somewhat widely in language.

The main Ibo area is, especially on the south and east, more or less surrounded by a fringe of aberrant dialects, which seem to have resulted from an incomplete assimilation of an alien population by Ibo-speaking conquerors, or, at any rate, a very imperfect acquisition of what might be called standard Ibo; or we may, on the other hand, regard these dialects (*e.g.*, Okugba, Biko, Ezza)<sup>1</sup> as allied to the older wave of immigration that resulted in Efik, Ibibio, Kana and Ebiobolo.

Generally speaking the main Ibo dialects east of the Niger seem to run strip-wise from north to south, and this, no less than the aberrant character of the southern or south-eastern dialects, suggests that the Ibo migration came from the north. In this connection it is noteworthy that Abua and Akunakuna, two closely related dialects, have clearly been cleaved asunder by the Ibo stream and now lie, one north-west of Degema, the other east of the Cross River.

It is worthy of notice that the word Ibo (Ibo) means slave; this suggests that there was no migration in mass, driving alien populations before it; but that a conquering people imposed its language on subject populations. This would afford a sufficient explanation of the character of the language of outlying areas, as well as of the great number of dialects which form a strong contrast to the homogeneity of the Yoruba area.

It is not without interest that the town of Nri, or Aguku, which claims the right of inducting chiefs and doing other ceremonial work as far as Asaba, at least,

<sup>1</sup> See my *Specimens of Languages*, pp. 16, 17, 89. Open vowels are shown է, օ.

on the west, and, probably, over an equally wide area in other directions, also speaks of the people of the surrounding area as Ibo, and themselves claim the name of Nri. This fits in well with the supposition that they are an island of the original Ibo-speaking conquering race, which is now swallowed up in the mass of the population everywhere else.

As regards the areas with which this paper deals, the districts of Awka and Asaba, the former includes the town of Aguku, just mentioned; generally speaking, there are few traditions of origin among them. In Asaba, on the other hand, each town has its tradition of a founder or a record of migration, so that the diversity of custom is easier to understand. Generally speaking, Asaba, Ibuzo and Okpanam form a closely associated group, as far as general customs go. Some data for the other towns and for the Awka district will be found elsewhere,<sup>1</sup> together with maps showing the localities, which are enumerated below, for each district.

Asaba was founded by Nevise, according to tradition, who came from Nteje on the east of the Niger perhaps some four hundred years ago.

#### AWKA DISTRICT.

At Awka when a young man dies all members of the family are notified; the body is washed in the court by sisters or relatives by the same mother and then dressed with cloth; the grave is dug in a room in the house by his friends or in his father's house or in the road and the males of the family put his body in the grave; the rest of the family, male and female, are also present. On the eighth day they kill a goat on the grave; it is eaten by the family, but some of the flesh is put on the grave.

If a man who has made ajagija title dies, they wash the body as before and split a fowl's beak; the blood is put upon the eyes of the dead man; this is said to be to open the dead man's eyes; a ram is killed with a knife and blood put upon the right hand of the dead man; this is said to be to praise his hand. The brothers provide the victims and kill them; if there are sons they call all the ajagija members in Awka before sacrificing, and each member provides two yards of cloth; the coffin is made by relatives and is made of oji wood, and is a rectangular box; the grave is dug in the sleeping room; all follow to the grave and afterwards wash; the friends and family lament for sixteen days; some food is thrown upon the grave for all alose to eat there.

I saw a burial at Amqbia, close to Awka. The body was laid out (Plate III, 1) close to the men's house (*obu*), with chalk upon the trunk, but little or none upon the face; the legs were completely covered with chalk; it was a woman's body, and that means that it cannot be carried out by the door, but must be hoisted over the back wall (*ib.*, 2); the body rested upon palm ribs, and these were carried away by a woman as soon as the body was taken up and thrown into the wood; two men carried the body down the ordinary road and then turned some hundred yards into the farm; here two men with hoes speedily dug the grave about

<sup>1</sup> See my Report on *Ibo-speaking Peoples*, I, IV.

three feet deep; after the body was put in the grave (*ib.*, 4), the basket (*ib.*, 3) used for lifting ground out of the grave was thrown on it also; half-way between the road and the grave a woman was waiting with water to wash the hands and feet of the gravediggers (Plate IV, 2).

At Agolo women are buried in the farm, men in the house near the yam store; when a man is dying his wives may not see him; they are driven away to the bachelors' quarters and remain there until the body is buried; the daughters rub camwood on the body, a fowl is killed for a rich man and blood put upon his eyes; the widow sits down in the house for twenty-eight days and does not go to market for three months; she may remarry as soon as the second burial is over, and receives a hen from her suitor to give to the women of her mother's family; this is named the "hen to recall the woman." A husband does for his wife exactly as a wife does for her husband: he carries a small knife like a widow, which is tied to his wrist, and after twenty-eight days a woman of the family takes it off and gives to the man a necklace of cotton to be worn for another two months, and then taken off by the same woman. A married woman is carried to her own town for burial; the husband may not carry her, a child may follow her, but no other relatives. A curious usage is that any palm oil in the room of the dying woman is taken out, for the husband may not eat it; if the woman has been long ill, the husband may send a message to her family, to say that the body cannot be carried away; a goat is then sent and the body buried by the husband's family. If a woman's husband dies when she is at market, they wind a palm leaf round her finger.

At Adaji a man's grave is dug in the yam yard, a woman's in the farm; the Amoru quarter sacrifices a goat to the ana before burying in the yam store; the grave is dug by the young men of the family and the body is carried on the head or in the hand; all the family are present, including the married daughters, but excluding widows, the father and the mother; the bearers and any others who wish wash their hands; as regards mourning, the last child on the twenty-eighth day shaves the man from back to front of the head. A woman is fetched home by men of her actual relations; if she belongs to the so-called Ekwe society the husband brings a fowl called the Ekwe society fowl; then comes the rich men's fowl, the young woman's fowl, the goat of the money basket, the goat of the woman's Ci, and a goat for powder. While the body is being taken home the grave is being dug at the farm, and the oldest woman of the family touches the body with a palm leaf, which is placed in the grave; the body is carried over the back wall to the main road, and if they have to cross water a she-goat and a hen are killed to the river; branches of a strong smelling tree are carried by the women to keep the spirits (*mwo*) from stopping them on the road; the body is carried to the compound of the woman's father, a dried palm branch is brought and cut into pieces and planted in front of the body; a round basket is also cut into four pieces; the eldest daughter mourns with the husband for twenty-eight days, but she does not take off her necklet, as the husband does.

Anyone whose body swells is not allowed to die in the house; he is taken out

into the farm and tied to a tree with string on hands and feet ; the second burial is made in the harmatan season, for if rain fell during the second burial the family would be driven out until they had provided a cow and sacrificed to the ground.

In the Enugu quarter the bearers wash with the following compound : four leaves of alligator pepper, four leaves of kola, and a small quantity of soap pounded up ; when a woman dies who is a member of the Ekwe society the members do not go to market on the day of burial. If it is only a young girl only her companions dance for her ; for a grown woman all dance.

Suicides are put in the bad bush (*ajofafia*) ; there is no lamentation for them and no sacrifice ; poor people are hired to carry away the body and no one follows them.

At Obu all dead people, even children, seem to be buried in the house ; infants without teeth are simply laid in the ground and covered with grass ; they say that Ćuku kills them and they offer a fowl to Ćuku when they are sick, by hanging it on a bamboo leaf and giving it to Abwala ; the body is first of all washed and the face marked with black to the end of the nose ; the head is shaved just above the forehead, and the hair put in the mat with the body ; a cock and a ram sheep are sacrificed and the blood put upon the man's eyes : chalk is put round the eyes and eagles' wing feathers and parrots' tail feathers put in the hair ; white cloth covers the body up to the throat ; a he-goat is sacrificed ; the heart cut out and put upon the man's chest ; the bodies of victims are kept on top of the wall until the ceremonies are finished. The plank on which the body has been lying is put in the grave and a goat skin upon it ; after the body has been put in, women and small children are sent away ; men take sand in their left hands, pass it round their heads and throw it on the body, saying. "If you know who killed you, follow him." The victims are eaten on the next day, but a man may not eat the ram or the cock. Second burial takes place thirty-two days after the first ; if another person dies they wait for his burial until second burial is over, the rites of which must be performed on Eke day ; if a cow is going to be killed they cut the tail off and touch the hands with it, the cow itself is killed on Oyi day ; the widows sit in the house for one year, but they do not shave their heads ; they cannot rub camwood nor mark black marks and may only wear a small cloth ; after twelve months they can shave or not as they please ; the eldest son shaves in three weeks ; if a man is killed by lightning and falls on his face they sacrifice a ram to the ground before carrying him away for burial<sup>1</sup> ; if a man dies away and the body cannot be recovered, a palm leaf is cut and carried to the road ; they lay this down.

As regards the observances connected with the widow, she may not go to market for three months nor touch anyone with her hand ; she cooks for herself. In one year a woman shaves her head over her ears ; if anyone wishes to marry a widow he takes palm wine and four kola and calls the family to meet at the shrine of the ancestors ; if she has already borne children, 10s. is paid to the father, and a

<sup>1</sup> Elsewhere a man killed by lightning may not be buried in the house for fear he may become an *ekwensu*.

goat is sacrificed to the ancestors; otherwise the bride price is paid as usual, if the second husband is not of the same sept as the first.

I obtained a few particulars of the burial customs of the people of Ndikelionwa; they do not differ markedly from those of Qbu; if a man dies far away and his body cannot be recovered they take a palm leaf and a chicken and go to the bad bush (*ajofafia*); holding the palm leaf in the hand, they kill the chicken, throw it into the bad bush (*ajofafia*), knock the leaf on the ground, take it on the left arm and go back, saying, "Dead man follow me home"; if it is a man who has died they put the leaf outside the yam store, if it is a woman they leave it outside the door; in the case of a man a goat and a cock are sacrificed, and blood is put upon the leaf exactly as it would be upon the dead man's eyes, the leaf is wrapped in cloth as if for a body; in the case of a woman the goat's heart is put upon a spot to represent the chest.

The account given me at Aguku was very elaborate. Two or three people, not one only, are with a man when he is dying. One holds his hands, one his feet and one his head, so that he may not turn his face to the ground; when he is dead they bring a mat and put four palm leaves under the body and cover it with chalk after two women have washed the body. In washing the body leaves have to be used, as hands may not touch the body. Kola leaves employed for this purpose are put in the right hand of the corpse, okba leaves in the left; after washing, camwood is rubbed on the body, and it is lifted upon the bier; a cock is brought and its beak broken and blood put upon a man's right eye: in the case of a rich man they may wait several days before burying him; when the grave is about to be dug, a woman of the family takes a palm leaf and strikes the ground on the spot where they are going to dig the grave, saying, "Old body move away for new body."

The grave is dug in the courtyard, the women take away the palm leaf and bring a piece of round basket and scrape the ground four times; two young men dig the grave, and two help them to take out the earth; when the body is put in the grave all turn their faces away; the grave is only eighteen inches deep, and no one stands in it to take the body.

Whoever puts the first earth on the body says, after passing the sand round his head, "Body go to him who killed you." Then a woman takes a piece of round basket and scrapes the ground four times, kola and peper leaves are used to rub the hands, but no water is used; at daybreak, in the case of a married man with a child, they kill a she-goat; if he has no wife, a small he-goat; widows or widowers are not present at the burial of a spouse. A large number of people assemble at the man's house bringing their staves (*alø*) with them; the eldest brother takes sand in his left hand and says, "this body never turned its face to the ground, never said bad word, never did forbidden thing." Guns are then fired and the time of second burial is then fixed.

For second burial cows are killed. A palm leaf and one chicken are taken to the bad bush (*ajofafia*), and the man says, "body do not go home, we bring you second burial," then he strikes the ground with a leaf and kills a chicken; the leaf is

laid on the left hand so that it cannot turn and put down outside the door, with mud on it so that it cannot move, nothing is to cross over it; young men take four pieces of raphia, and put the palm leaf on the top; this is carried to a grave in the street; a woman of the family receives the leg of the goat and the liver; she takes pieces of the liver and turns her face away and throws them in the grave, saying, "I put that in for you, keep all our people alive."

In the middle of the night the same girl goes to the house of the dead man, and lights the fire for the widow; she must sit down with her; this is called putting the woman whose husband died in mourning. At four a.m., when the first cock crows, the widow takes a small pot of water, the girl clears the ashes of the fire, and the widow completely unclothed carries the water after her to the bad bush (*ajofafia*). The girl throws the ashes away and washes the widow; no one may see them; after that the widow may put a cloth on; the widow sits ninety-two days in the house and then goes and washes in silence. Twelve days after the second burial of a man who has not made a title, they go to the house of one of his companions and take a cock that has never crowed together with some yams; the yams are cut up and cooked, one is roasted; palm wine is also got which has never touched the ground; an *oglisí* stick is brought and cut in two and tied to a post of the house with five palm trees which have never borne nuts; plantain leaf is put upon the ground with *ofo*, and they slide the *oglisí* down the post, saying, "Let it climb down and eat"; then they plant in the ground against the post and kill a cock to the *oglisí*, which is known by the name of the dead man; roast yams are thrown upon the *oglisí* and all eat; the *oglisí* and the offerings of mashed yams are then taken and put under the roof so that no one can see them.

If a man's father-in-law dies, the son-in-law cooks food and takes it to the place of the dead man, together with palm wine that has not "touched the ground"; if the family are not satisfied with the quantity, the son-in-law must put money on the dish.

The *okbensi*, or image of the ancestor, is made of *oglisí*, kola, or *iroko*; the head of the quarter sacrifices a cock to it; they call the *okbensi* by the dead man's name, saying, "Let him eat," and it is then called one of the *Ndičie*.

A widower sits twelve days in the house; no one may touch him, and he is not to eat with others. If his wife has died less than twenty-eight days after childbirth, the husband sits upon his wife's plank and goes to wash after twelve days, taking the plank. He calls the people of his wife's place to come to second burial; a he-goat, chalk, round basket with salt and palm oil, small cooking knife, eight yams, two kola and a hen are sacrificed. If the woman has borne a child, her husband may make second burial for her, otherwise her father must perform it; they make *okbensi* for a woman exactly like a man, but they have their own *Ndičie*. At second burial the eldest son shaves his head and all the wives; daughters shave a place on the forehead; the hair of the women must be put in the bad bush (*ajofafia*).

When a man's father-in-law dies, he has to bring a goat called the camwood

goat; they say the dead man takes the goat and goes to Čuku; if the goat were not brought the father-in-law would not be reincarnated in his son-in-law's family.

For second burial a son-in-law brings a goat, cuts off one foot and puts it on the ground, then he takes the goat home and kills it; when he cuts off the foot he says to his Či, "My father-in-law is dead; I only cut off the leg for him; if he were here he would kill it to you." Two legs, the chest and the head are taken to the father-in-law's house; after twelve days he cooks thirty big pieces of yam, thirty calabashes of mashed yams, and soup; the women of the family take one share, the Qzo members one share, and the children one share; the son-in-law himself is not present: this is called "food for tears"; after this is eaten they tell his wife to go back till they have finished second burial; if the son-in-law did not send it the wife would not return.

I received three accounts of burial customs at Enugu. The body is washed in the morning, a mat laid on the ground and a cloth put over it; if it is an old man they bury him in the house, if it is a young man he is left outside; a cow is killed before the body is put in the grave as a sacrifice to the man's Či. Three days after death a woman takes a chicken tied with a palm leaf and goes to the bad bush (*ajofafia*); she puts it on the ground, saying, "My brother, come and eat," and leaves chicken and leaf there; when the woman returns, food is cooked and put in front of the house, and the dead man is told to come and eat; they leave it there a short time, and then the women of the family consume it; after twelve days the women cook outside the house; no man may be present; they beat a drum and say, "Our brother has begun to eat." On the day of second burial they take meat and *okbensi* and put them together in a grave dug in the yard, together with a small bead. The hen is killed and the blood thrown on the body, then the grave is filled in; in twelve days the man's companions come and bring his *Ikenga*, after walking round and dancing.

If a woman dies they send to her people, and her brothers and sisters come with a drum; if she has a son, he may take a cow and offer it to her people; the son follows the body; her family brings goats, cloth, etc., and her brother says, "My sister, here is the goat I kill for you"; this is killed before the house of the woman's father. The same ceremony is performed in the bad bush (*ajofafia*) as for a man; second burial is performed in the same way, except that the *okbensi* is not buried. If a small boy dies, or a man who has no house, they take a small goat and build a small house outside before his father's house and kill the goat there.

In Enugu Ivitana when a man dies they bring a mat and raphia leaves; the body is laid on the mat and covered with cloth; it is washed outside, and in the case of a man a fowl is killed and the blood put on his eyes and hand, and feathers in his right hand; a goat is also killed and some meat roasted and put in palm oil; this is put in the dead man's mouth and called "throat meat"; they say, "Eat it and go to the man who killed you." The corpse is said to move its mouth when

the meat is put in, then the body is covered with cloth and tied up ; for a rich man the grave is dug by four young men in his house or garden ; other people are buried in the farm ; two grave-diggers carry and two take the body down into the grave ; each man passes sand round his head and throws into the grave.

In the Osili quarter they put a plank down in the house and take the body up ; a mat is put outside and the body taken out and covered with cloth ; a fowl is taken and pointed at the dead person ; blood is put upon the dead man's eyes and right hand ; they say, "Look at the fowl ; take it and eat ; take it and go away" ; then a goat is brought and they say, "Look at the goat which we sacrificed to your Ci" ; a piece of the throat is cut out and the meat put upon the ground ; then four bamboo leaves are brought and the body of the goat put in ; the piece of the throat is eventually put in the mouth of the dead man ; no Qzo, Eku, or Ci members may go to the grave, nor may a man who has the same name. Twelve days after second burial a woman shaves the man's head in the early morning, and the hair is taken to the bad bush (*ajojifia*), but the widow herself does not go.

On the first day after death the son-in-law must bring a cock and cloth, on the day of second burial a goat ; in return for this the father-in-law's people give boiled yams and abaca to the son-in-law and his people ; twelve days after second burial the son-in-law sends the food of tears, which only women eat.

In Uruekwe, when the body is to be washed, two women wash it four times from head to foot, each taking one side ; then they rub camwood, each taking one side ; after this a goat is brought and held out to the corpse, "Carry it to him who killed you, don't trouble your own people" ; a cock is brought and held out and the same thing said ; it is afterwards killed and thrown down, and blood is put on the eyes with oglisi wood ; when the corpse is tied they take an oglisi leaf to make a pad for the head, and isikeli for a second head pad ; two men carry the body into the grave, which is near the house ; then the body is loosed and put in the grave with mat and cloth ; when the grave is nearly full the bamboo which formed the bier is put in ; as usual, sand is passed round the head ; they go to waterside and wash, but only the young men and women ; at night they beat the wood drum and blow the flute.

When they give notice of the day of second burial, a he-goat is killed and shared between the women of the family and the old men ; a hen and a small pot used for amauhulu are brought, and a bead and two bells are put upon the second grave site. People of Udo dig a small grave, and these objects are put in and the hen killed upon them ; the throat of the goat which has been killed is put on the grave ; a man takes a palm leaf and a woman of the family uses it ; she knocks the leaf on the ground and says to the dead man, "My brother, let us go and cook food for you" ; then the woman ties the hen to her palm leaf and knocks it on the ground till the hen dies ; then she takes it off and puts the palm leaf in the *ajojifia* ; she takes another leaf home in its place and puts it on the roof outside.

In twelve days the woman takes the palm leaf to the place where the entrails of the goat for second burial have been put and takes everything to the *ajojifia* ;

four oglisi are tied to one of the roof sticks of the obu, a leaf is put on the ground underneath, and a fowl is killed to the oglisi on the roof ; blood is sprinkled on the oglisi ; four pieces of mashed yam are taken, which the head of the family puts on the roof ; they fall on the oglisi leaf, and a young man carries the mashed yam outside, digs a grave and buries them ; on the twelfth day the widow brings her own hen to the head of the family, who kills it to the ancestors.

I was told that a widow might eat nothing till after second burial, but this seems improbable. Among the things forbidden to a widow are : going out at night, talking loudly in the evening sitting on the threshold, putting anything into a man's hand, talking to a man with a climbing rope ; she is allowed to go to water-side to wash, but a man may not go into the water when she is there ; she can also go to market.

She does not go to bad bush (*ajøifia*) but shaves her head on the twelfth day after second burial : after having been shaved she gives two hundred yams to the Ezana and buys a small she-goat to be killed to the ajana ; when she wishes to marry her suitor takes a she-goat and two hundred yams to the priest of the earth (Ezana) at the end of the twelve months ; she is shaved again by the same woman ; the Ezana takes off her cloth and her husband gives her a new one : if a widow dies before second burial of her husband, Nimo people bury her and no fowls or goats are killed ; an Nri man is called after the second burial of her husband to "remove the forbidden thing" and then the rites of second burial can be performed for her.

In Nimo Ifitenu a mat is put in the house and a cloth laid on it and sticks are put so that neither hand nor face can turn downwards ; the body is put on palm leaves for washing, which is done by two women four times from head to foot ; the burial mat is put upon four raphia leaves and a goat is killed by the side of the body ; blood is put upon the right hand ; if a rich man is dead a ram may be killed and blood put upon the eyes. Apparently everyone must be buried in the farm ; when a man's body is carried out a piece of the wall is knocked down to make a gate ; in the case of a woman, part of a wall from the back of the house is cut off ; a hoe is taken and the wood cut from the iron and put upon the grave after the body is buried, but a woman takes the hoe and puts it away and they can be used again : at daybreak the old men come and someone takes sand in his left hand and says, "The dead man did not turn his face to the ground nor say a bad word, they never carried him wrong" (that is, head first). Then he puts some sand in his mouth and throws the rest down ; various drums are beaten in the case of a big man, and the dance known as Abia performed. A piece of okwe wood is cut and cleaned and a she-goat killed to it ; four pieces of raphia palm leaf are tied and the okwe put on the top ; they take the goat's blood in a vessel to pour upon the okwe ; on the first day of burial the usual ceremony is performed with a palm leaf of the *ajøifia*.

In the Ifitana quarter of Nimo the body is washed as usual and fowl's blood put upon the eyes ; care must be taken that this blood does not touch any person ;

an Ozø member is buried in the yam store, other people in the farm; in the case of a man only young men go, but men and women can go to an Ozø member's funeral; in the case of a woman the eldest son and daughter go; the body is prepared for burial by putting a wool cap on the head and eagle and parrot feathers in it; this is for an Ozø member only; after some earth has been put upon the body a single and double bell are put in the grave. When second burial is performed they wrap okwe wood in the mat, kill a goat, and put a piece of its throat in the mat and bury outside; a palm wine pot is broken upon this second grave; when a woman's husband dies she holds a small knife in her hand and sits upon the seat that runs outside the house for twelve days: no man may see her at night and a woman of her family collects the ashes of her fire and takes them to the farm (*ajago*) on the twelfth day. On the twenty-eighth day the ashes are cleared away again and cotton is put upon the widow's neck; she can then wash in the house and come out.

At the end of the twelve months she buys a dead she-goat and sits down with it in the road: all men pass cowries round their head on Oye day and say, "If I saw you at night or talked to you or went to waterside with you may it not kill me"; then they put cowries and sand in her basket and go on; the widow takes the basket to an Eku member's house and in the evening the member takes the basket to the place of the earth (*ajana*); the woman who carried the widow's ashes, shaves the widow's head and takes off her cotton; puts beads on new cotton round her neck and gives her a new cloth; the widow buys a hen and goes to the ancestors and her husband's obu; the head of the family kills it and declares that the woman and the Ndičie have eaten together; this constitutes a formal notification that she is no longer a widow, for as long as she is in a state of widowhood she may not eat to the ancestors. After second burial is over they make *ihiiekheke*, that is they tie four pieces of oglisi to a peg, and this must be done by a man of the same rank as the dead man; as soon as it is done they are taken off and put on the roof of the back house: the man who did the tying goes to a bachelor's house and puts a new okbensi on the ground; he offers kola, a goat and a fowl; the friends of the dead man come and eat and bring palm wine; at dawn the okbensi is taken to the dead man's house and kola is offered to it in the obu: then the dead man can eat with the Ndičie and be reincarnated.

I got three accounts of burial customs at Nibo.

At Umwannum quarter the body is laid on a mat anywhere in the house and cotton thread is put between the big and second toes; then the body is taken out and two women wash it four times and rub camwood four times; then they put black marks and pass a razor over the face four times; if his wife has borne a child a he-goat is killed and blood thrown on the right side of the body; a piece of the throat, palm oil and salt is put in an oglisi leaf and placed in the dead man's mouth. A cock is killed and the blood put upon the right side from head to foot and feathers on the right side of the face and in the right hand. A bier is made of

raphia midrib and the grave dug outside by ten men, four men of the family carrying the body; when they reach the grave they loose the body and take it off the bier and put it with the cloth and mat in the grave. Various things are put upon the grave, a piece of round basket cut in four pieces, and a hoe with string, a matchet is taken to cut the string and the hoe is taken away: the four pieces of the round basket are put in a square with the string on them, and the man who puts them on the grave jumps four times on them and jumps off sideways; he passes sand round his head and says, "Don't wash your hand for Ci before you kill the man who killed you." If a Nibo woman dies she is brought back to Nibo and blood and feathers put upon the body and also the throat of the goat; for small children a fowl only is killed; when the time comes for second burial a gun is fired very early in the morning and the part of the wall over the door knocked down; four oglisi are planted outside the door and a she-goat and cock sacrificed to them; then they dance Abia and clap their hands at the conclusion; after this the goat and fowl are shared.

A woman takes the widow into the part of the house called onombo and puts her by the fire; she shaves her head bare and takes the hair and house ashes to the ajoifia; the widow stays twenty-eight days in the room but may come out at night provided no one sees her; then a woman comes to take her to the ajoifia to wash; a small chicken and a palm leaf are taken by a man in the evening to the ajoifia, the palm leaf is looped and struck on the ground, at the same time the dead man is told to come back; the chicken is thrown into the bush and a palm leaf carried on the left hand and put against the wall. Ecičili is planted in front of it and the dead man's brother sits down in front and puts a palm leaf on his right wrist. A cock and a hen are then killed on the ecičili; yams, palm oil, salt, the liver of a fowl and its head are offered to four oglisi pegs in front of the ecičili; then a knife is taken and the ecičili is cut down and put on the ground, the knife is then knocked on the ground; this means that the dead man cannot plant yams again; before performing this ceremony they could plant the dead man's yams.

No woman of the quarter in which a death has occurred may either go to market or work on the day of a death; they say that this is due to "Odači," which means an obstacle—literally it falls and blocks the way. Another account of second burial in the same quarter said that three men, one from each of the families, get four kola and four coconuts, and the man will make the second burial; he fixes the next Eke day for it; on Nkwø day he calls the family and gives eight yams, a cock that has not crowed, a goat, a small shield, and four goat skulls tied to raphia leaves; the goat is killed inside the house; cowries are provided for the man who cuts down the ifejioko of the dead man, and he also kills the fowl and the goat; the fowl is eaten but the goat is kept till Eke day. On Eke day the wall is knocked down over the door, and the door taken off; a young man is sent with a chicken to the ajoifia and he kills it in the bush and brings back a palm leaf which he puts outside between pieces of mud. Two women and two young men are called, and one man

holds each end of the palm leaf ; the two women take two small pots, one in the right hand and one in the left, fill their pots at waterside and put them in kokoyam leaves ; these women wash the leaf four times as they do the body, and rub camwood four times ; cotton is put upon the place which represents the neck of the corpse, and a bier is made for the palm leaf ; a small grave is dug behind the front wall, and two men carry the palm leaf out and bury it ; one man cuts string from the hoe and takes four pieces of round basket and puts on the grave, and the two women break their pots.

Before this a ceremony called ibuboi ifejioko has been performed ; the chair of the dead man has been brought out and put before the door, and a married man of his family cuts ifejioko and plants ecičili ; one of the family sits on the chair and puts a palm leaf on his right wrist and one on the ecičili ; camwood is rubbed on the ecičili and the man's right hand, and a cock and a hen are killed on the ecičili ; then the ecičili is cut down and fowls and yams are put in a wooden vessel and offered ; red yams are cut up and put on the ecičili ; then a boy comes and takes the ecičili away to the ifejioko.

Having had no opportunity of seeing a burial at Nibo I got the men who had been giving me this information to act a burial over as a check ; the first thing that happens is lamentation ; the child or brother of the dead man holds the head of the corpse and weeps over it ; mud is then put on each side of the head and feet, and cotton across the neck ; a mat has previously been placed on the ground and a cloth is laid flat over the body ; then the body is carried out and after it the mat ; a fowl is killed and blood smeared on the body from head to foot ; the body of the fowl is thrown away from the corpse ; the blood of a goat is taken in an oglisi leaf and poured on the body, and a portion of its throat put in the mouth ; when it comes to the washing of the body, one man holds the head and one the foot ; the washing is from head to foot and the water is passed round the foot under the arm of the man who holds it ; then camwood is put on and a razor passed over the face, cotton is put across the neck, and four eagle feathers pointing downwards are put under the cap ; after this they lament and carry the body out feet first ; after taking it off the bier they jump up and down and jump off sideways ; a hoe is cut and put over the head ; a basket is cut up, sand is passed round the head and thrown over the body.

In their songs they sing, "blood blood, it is a man, it is a woman, blood blood," after this the abia dance is performed with the ofo of the dead man on the ground ; a fire is made near the abia drum to warm it, and they pass a fowl over the eyes of the player, subsequently dancing with it in their hands.

A son-in-law is notified of his father-in-law's death and brings cloth, a cap, and eagle feathers ; he goes and laments, and then goes home again to fetch a goat and powder ; the family of the father-in-law provide him with food ; when he goes to lament for second burial he takes a goat, which is killed and shared ; a wife will take one fowl to kill to her father's ci ; twelve days after second burial the son-in-law cooks mashed yams and sends palm wine and a leg of a goat in soup to his

father-in-law's place; this is "food of tears," which both men and women eat, but not the widow.

If a woman's mother dies and there are no sons and no father to bury her, the husband will undertake the duty; he provides two hens to be killed by one of the women's family, eight yams, two small pots used to bring water to wash the palm leaf which was taken to the place of the earth (*ajana*). This palm leaf is taken and laid on the left hand; the midrib along the arm; when they reach the husband's house it is fixed with mud outside the door; the daughter rubs the leaf with camwood mixed with water and puts cotton across the leaf at each end; a palm midrib is taken, a basket made, and the palm leaf and cotton put inside; all is tied up with string and buried in a small grave outside the street door; the two men who bury it pass sand round their heads and say, "Don't wash your hands in the face of your ī before you kill the one who killed you"; the two pots used for washing the leaf are broken into the grave and four pieces of round basket put on it; the string is left on it. One of the people of the dead woman take two fowls and pieces of ečičili wood which they plant in seven days. One yam cut in four is put upon the ground and the two fowls are killed on the ečičili; one fowl goes to the dead woman's people, one to the husband's people; the livers and heads of the fowls are put in a wooden vessel with palm oil and yams, and these are put on the ečičili; then the ečičili is cut in two with a matchet, feathers, yams and heads are raked into one heap and the man takes water and washes his hands.

Another account I took down entirely in Ibo, and the following is a summary of it.<sup>1</sup> After lamenting they rub him with camwood inside the house, then carry him outside and rub him again four times; then one of the women takes a razor and passes above his head, and lays cotton round his neck; one of the family kills a goat and pours blood on his hand and puts the throat in his mouth; fowl blood is also put in his hand, and feathers; before digging the grave in the farm, they strike a palm leaf on the ground to remind the old dead bodies to get out of the way; before digging, they measure four times with a piece of basket, four times with a hoe; the corpse is carried on a bier of bamboo which is broken and put into the grave; then the ceremony with sand is performed: the widow takes off her neck ornaments and stays in the house during the day; at night she carries the ashes of her fire to the *ajoifia*. In twelve days the woman who removed the neck ornaments shaves her head and puts cotton on her neck; the hair is thrown in the *ajoifia*; they break down the wall at the back of her house for her to go out; she does not cook for anyone and no one cooks for her, except a small girl who has not yet put on neck ornaments; she may not touch any male person except a small boy who has not put on a loin cloth; only her son may go to her house at night; no one may go into the water where she is washing, nor step over her legs; after twenty-eight days they rebuild the wall, she uses the ordinary door and they go to market; after this nothing more remains than to sacrifice to the place of the earth (*ajana*) in the way already described.

<sup>1</sup> *Ibo Report*, III, p. 129.

At Nise, in the Ezawolo quarter, they tie a man's feet and carry him out, for women to wash the body; then it is put in the man's sleeping room or in the obu; a fowl is killed and blood put on the right hand, the sacrificer alone eats the fowl; in the case of an important man a goat may be killed, when all the rest of the family may eat; an important man is buried in the yam store, others in the farm, and the grave is dug by men of the same age as the deceased; earth is taken out with a basket twice to the right, twice to the left, and so on; for a man no bamboo framework is used in the bier; the usual ceremony with sand is performed and the earth scraped into the grave with the hands; they wash at the waterside and say, "water, take away the bad thing." In the case of a woman she must be buried in her own town, unless some dispute prevents it, in which case land is bought in the other town for the grave; when they are carrying the body back the women sing and the men beat a drum; they carry the body to the front door of the father's house, then to the farm; they can take her Ci and kill a goat to it, and touch the left shoulder and eyes of the woman; if anyone refuses this meat they say that he or she killed the woman; the namesake of a man or woman is not allowed to eat the funeral meat however.

For the second burial of a man, a cock, a hen, and a ram are killed on the ground to give notice of second burial; the sons-in-law brings goats and the daughters bring fowls, the goats are killed in front of the house. Brother and sister dance, the woman with a tin fan, the man with a knife; then the daughter collects the women of the family and they dance round the quarter all night collecting yams; the son marks his arm with camwood and puts down ečičili and oglisi, marking the former with camwood; yams and palm oil are offered, and the ečičili is cut through at one stroke; the oglisi is divided between ifejioko and the front of the door.

The bystanders wash; the palm leaf and chicken are taken, as usual, to the ajoifia; after second burial a goat is passed over the widow's leg, but some of the prohibitions do not prevail here; a man may pass through the water where she is washing and may eat with her, except on the twenty-eighth day when she re-enters the house for second burial. The customs in the case of a woman are very nearly the same as for a man, but red yams are put in the road and ečičili and oglisi are planted on either side.

In the Ngodo quarter of Nise two women rub camwood in the house and two men pass their hands over the body outside but do not touch it with water; two eagle feathers are put in the hair, but afterwards the head is shaved; the usual ceremony is performed with the blood of the goat and fowl; after striking the ground with a palm leaf they tie a string round a hoe and make four strokes; then this hoe and some cloth are put down and the grave dug with other hoes; a pad of oglisi leaves is made to carry the corpse, and after the earth is put in it stamped down; the basket that has been used, the bier, the pad, and the mat on which the man died are put in the ajoifia; the camwood pot is broken on the grave and the hoe cut from the stick; abia is then danced and guns fired. The

widow is taken by the arm and twice bumped on the wood of her basket in the women's house. Then her beads are taken off and she wears only cotton ; women and her husband's sons may talk to her.

When it comes to second burial part of the front wall is knocked down, and a bamboo leaf put up early in the morning. An Ezawolo man takes a palm leaf and fowl and calls the dead man in the ajoifia ; another man takes it when he returns and hides it in a small hole near the front door ; in the evening it is buried ; two women wash with water four times, kill the chicken, and it is then buried and stamped upon, and the water pot broken on the grave ; they wash with water or an oglisi leaf ; the son kills one goat before Ći, cutting the throat upwards, and drops the blood on Ći, then all run. In twelve days Ći is dug up, the widow goes to the ajoifia, takes the cotton off her neck and washes at the waterside ; the Ći and abwala of the widow are dug up at the same time as the Ći and abwala of the man and put in the ajoifia ; when the widow wishes to remarry she sits down, legs stretched out in the house of a bachelor, and her suitor steps over her legs ; he takes the string from her neck and waist and she takes them to the ajoifia and washes ; after second burial the widow can take her property to the house of the dead man. Before the marriage is finally completed an Nri man puts two cowries on a string round the waist of the husband saying, "oh, husband, take your hand from the woman, let the new husband come and take her."

After twenty-eight days the women bring a fowl in the morning, tied to a broom ; four oglisi are planted in front of the Ndićie and sacrifices are offered. No new okbensi is made, but they use that which was used for Amauinulu. According to another statement they do not dance Abia in the quarter nor knock the wall down, but that is probably unreliable.

At Nofia they lament over the body in the house, where it lies on a mat ; the young men put the body on a mat known as ute amili and carry it out and put it on a plank to wash ; two women wash twice each from head to foot and then wash each other twice ; a fowl is pointed to the body and taken away to be killed, which is done by slitting its neck upwards ; blood is carried in an oglisi leaf to be put on the eyes ; a goat is dealt with in the same way, but as a rule a piece of the throat is simply roasted and not put in the mouth ; when the grave is filled in women trample it twice and come off at the head ; no sand is passed round the face ; the widow may be present at the funeral, but when she passes over the step of the house all men must rise up from the seat outside, otherwise they are na nsp, that is in a state of tabu.

In the ceremonies for second burial two bamboo are put in an arch against the door and the wall knocked down over the door : in the interval before second burial the family may not kill fowls nor drink palm wine ; an okbensi is put down before Ći, and a goat's ear cut off and put on the okbensi, which a woman picks up, roasts, and eats ; the goat is then killed and the blood put upon the okbensi ; after the burial of okwe, which corresponds to the palm leaf, the widow can come back and sit on the wood of her long basket ; she gets a cooking knife

and a whip stick, but no man may see or talk to her; a palm leaf is taken to the ajoifia, and when it is brought back a piece from the leg of a goat is put with it, a bier is made and women wash the leaf and take the rest of the leg as their share, a grave is dug outside, but the leaf cannot be carried on the head; the okbensi is thrown in the ajoifia, ēi, and abwala dug up; the qbo of Āi may be used for firewood, but it must be kept in the obu. The son-in-law has to perform the usual duties in the way of providing food; after a death no one in the sept can go to market for twelve days and all the quarter would stay away for one day.

In the Umokwa sept some of the observances connected with the widow are peculiar; after second burial a woman takes the widow, unclothed, to the waterside at night; after washing she fills a small pot and carries it on her shoulder; a small fence is put to keep goats and fowls from entering her house, and on her return from the waterside she gets a stick of okakba tree; one old woman cooks food for her, and she only may eat the remainder of her food; in twelve days a woman takes the widow out in the day, but she may not speak, and in twenty-eight days she is shaved.

When a man's mother-in-law dies he begs young men and women to go to the burial; if it is his father-in-law, men young and old, only, are invited.

The customs of Amaisi differ somewhat; there is no custom of putting blood upon the eyes, the ground is struck with a hoe, not a palm leaf, to warn the old dead to go away, sand is not passed round the head, and at second burial they do not go to the ajoifia; a small part of the front wall is broken down by the people of the deceased's mother; the only semblance of burial that takes place is that they take a piece of meat and inter it somewhere in the house; this is called the burial of the meat; a wife may be buried by her husband, or fetched by her own people: it is a matter of agreement.

At Ebenebe a man takes a matchet and marks off the length of the grave; in the farm for a young man, in the house for an old man, then a man swings a hoe four times and strikes the head on the ground; another does the same and marks the outline of the grave; the first man begins to dig, and when completed it is five or six feet deep; a woman passes a razor above the head twice, and passes her hands, dipped in water, above the body four times; camwood is rubbed on the body; for an old man cock and ram are passed over the head twice; the cock's head is torn off by placing the foot on it, and put in the right hand of the dead man; when the corpse is finally tied up a hole is cut in the mat so that the hand can pass through; a cap is taken to cover the head, and four eagle feathers passed four times over the head and taken away; three bearers carry the body, contrary to the usual custom; when earth is put in the grave it is stamped down; as a rule only young men go to the farm. Twelve days after burial they call the dead man, the brother takes a chicken and a cock and goes out with drummers and flute players; the fowls and a palm leaf are held out to the sun four times, saying "my brother come back home to-day and eat," four oglisi are planted, and the palm leaf and chicken are laid before it.

Contrary to the usual custom, women and children are buried in the enclosure of the house; an infant on the side of the road or outside the door; they make a fence and cover the body with leaves; in the case of people buried in the farm they wait a long time and the second burial is unimportant; second burial is made for everyone except infants.

At Ebenebe, according to another account, the body is brought out by two men and put on a palm leaf; all the women go to wash the body; it is then carried to another place and put on a mat and camwood is rubbed; a cock is killed on the ground and a small feather dipped in blood and put in the right hand, three midribs of palm tree, two of raphia tree are used for the bier. Children are buried in the farm, youths and others in the garden with a small house over the grave, a big man in his house, which is then deserted; no one may eat in it, and it is called Ajago; women go to burial; a daughter puts sand on the grave and all the women stay in the man's house for twelve days.

The widow lies on the ground without sack or mat; she has to wear leaves instead of cloth for one year, and no one may touch her or look at her; at the end of a year an Nri man is called to remove her from her condition of widowhood; the first step is for him to cohabit with her, then another widow shaves her and she washes at waterside; the suitor receives a chicken from her, and strikes his chest with it, then he passes it round her and throws it in the bush; after eating together she is regarded as his wife. In the second burial rites a she-goat is killed to the Ci and a he-goat tied to it; two legs of the goat are put in the dead man's bag, a hole is dug in the grave and the bag put into it and covered with mud; the mother's people come and take the goat. In the case of a man who has made ofoh'ba title a ram is killed at the door of the yam store; eight oglisi pegs are put in the ground with the leaf and a ram and hen killed on it; the hearts of these animals are buried in the ground at the door.

On the day of the first burial a palm leaf is taken and struck on the ground; this is kept or hidden until after second burial, when it is buried with a piece of okwe tree exactly like a body.

At Mbwaku we come back again to the region of the Awka dialect, but there are certain small variations in the burial rites; palm leaf is put upon the ground and the body is washed outside by one woman; camwood is put upon the forehead, then upon all the body; when the body is put in the mat, the right hand is laid on the breast, a fowl is killed and blood dropped upon the hand and feathers put in it; a goat is also killed, and the last blood is put in the right hand with some hair; a deep grave, six feet deep or more, is dug in the farm; the body is carried on two raphia leaves, which are buried with it; when they leave the grave they strike the ground with another raphia leaf and say, "Let us go back." This is spoken to the dead man. After eight days goats and fowls are eaten and an okbensi is made; the widow has to sit down in the women's house, and no goat or fowl may come in; she holds a cooking knife and takes a whip to drive a goat or fowl out instead of shouting; after twenty-eight days, when she goes to wash, she

has to catch some small fish and bring them home; these are cooked outside the house with some yams given her by her suitor, who may not eat himself; then he gives other yams, of which he may eat, and after sacrifices to the *okbeni* of the dead man the woman is his wife. For second burial *okwe* wood and four raphia leaves, in which the chicken and the *okwe* are wrapped, are buried in the back house; mashed yams are put in the camwood pot used for the burial, and it is broken on the grave.

At Ačala they lament rhythmically, with five or six repetitions of a melodic phrase; then a new figure takes its place; the wailing may go on practically the whole of the night; no blood is used nor feathers; the grave is dug in the farm; part of the wall is broken down to carry the body through, and only young men follow it; the ground is struck with a palm leaf, which is put up in the road with various emblems for some days after death. In former days at Ačala they left a slave on the grave of an *Ozo* member; another slave broke his legs and arms, and he was left to die.

At Ibwariam they put camwood on the body in the house, make a bier of four raphia midribs, on which is put the mat (*uteamili*, here called *mbala*); the body is brought out to an open space, and for a young man a ram is killed with one stroke of a matchet; then the *ikenga* is broken.

I was fortunate enough to witness the burial ceremony of a woman the day before I left Ibwariam. She was a native of the town, and married into another quarter; death took place at about 10 p.m., and the mourners from her own quarter traversed the open space (Plate IV, 3) on the side of which I was living: as they passed my house they appeared to be talking about various things, but broke out into wailing some fifty yards further on—one hundred yards or so from the house; after lamenting for an hour they returned, keeping up the wailing until they had reached a certain distance from the house; then they began laughing and chatting; early the following morning the women of the quarter danced in the open space; the plate anklets which they wore rendered any real dancing impossible, and all that they did was to step once to the left, and three times to the right, thus progressing slowly in a circular direction.

About midday the body was brought out and put down in the space where the dancing had taken place; cowries were thrown down, and there was a certain amount of wailing; after a short time the bier was picked up by the young men and carried to the woman's own quarter (*ib.* 4); here it was put down, and the girls of the quarter up to the age of about seventeen came and threw themselves down on their knees and elbows and began to wail; they massed themselves at one end of the coffin in one sheltering heap (Plate V, 1), and so far as I could distinguish the words, they were, "Oh, our sister, why have you left us?" but each seemed to give utterance to any sentiments she chose; one girl was seated on a stool at the other end of the coffin, and whereas tears poured down the cheeks of the wailers, this girl appeared absolutely unmoved, and, so far as I could see, did not speak. It appeared afterwards that she was the sister of the deceased woman.

While the wailing was going on, men, who congregated in the shade of a tree (*ib.*, 2), for the sun was beating down fiercely, brought offerings of cloth and laid them on the coffin; cowries were also thrown down; the elder women of the quarter appeared to take no part in the wailing. After this extraordinarily barbaric scene had gone on for twenty minutes or so, the bier was picked up and carried to the farm, and the wailing ceased as if by magic.

The women do not attend at the grave, the family sit down for twelve days, and a pot of water is put in the *obu*, from which anyone who comes takes water, to wash before they take *kola*. There is no second burial of any sort; the *okbensi* is taken to the head man of the sept, or possibly of the sub-quarter, who puts it in his *obu*; when they get a new head all the *okbensi* are removed after a sacrifice.

The widow stays twenty-eight days in the house, but she fetches water and cooks for men; on the twenty-eighth day she goes to the waterside and just dips her hand in; she can marry in twelve months.

From the above accounts of the various local ceremonies it is apparent that there is a certain amount of differentiation between old and young men, women, children and infants, though the details do not agree in every town.

There are, however, certain diseases which render patients incapable of being buried in the ordinary way; a man suffering from elephantiasis is not allowed to die in the house, but is removed to the farm, and sometimes simply exposed after death; in some cases a surgical operation is performed after death to remove the enlarged part, and then he may be brought home and buried in the ordinary way. Smallpox, dropsy, syphilis, leprosy, and a sort of cholera known as *itolo*, disqualify the sufferers from dying in the house and being buried in the ordinary way; at most they will be covered with leaves in a shallow grave. Second burial may, however, in many cases, be performed.

A woman who dies in pregnancy is also not buried in the ordinary way in most places; but at Nibo one of the women who has come to childbirth is called upon to perform the Cæsarian operation after death, then the woman is buried but not the child. I have not heard of any case in the Awka district, but the Onicha custom is said to be for the same operation to be performed on a sterile woman.

#### ASABA DISTRICT.

In recent years burial customs have undergone considerable change in the Asaba district. In former times it was the practice to sacrifice one or more slaves at the funeral ceremonies of a man who had attained a certain status, and although the custom is still carried out sporadically, as in a recent instance in 1912, the habitual practice of it is a thing of the past.

As elsewhere the rites of burial vary according to the age, sex, and importance of the deceased. More sacrifices are necessary for a man who is married and has children than for a young man who has not taken a wife. In the case of a man

who has taken ñkpese title a he-goat and a ram are sacrificed; for ñkpalo three goats.

*Burial of Eze.*—The general procedure is the same in all cases. First of all a man and woman lament, and during this time various requisites for the funeral rites are collected—palm wine, yams, powder, and so on. The body is washed in the yard usually by a man of the quarter and laid on a mat, though an eze must sit with eight different cloths on him. The head is shaved by a woman, and cowries are put upon the wrist, and in the case of an eze, a bead known as idibwe or ofiji is put in his mouth and also chalk. A red cap is put on the head of an eze with two eagle's feathers, and if a stranger enters the place he salutes him. The body is put in a coffin of iroko. Then the ada (head woman) has to come and bring a he-goat and a cock. The mat which was hung over the body is her perquisite, and also the cock and the goat and the eze's razor, "the iron he used to kill people."

Another account of the duties of the ada stated that formerly the body of an eze (literally, king) was kept about eight days, precisely as is done with the body of a blacksmith in some parts of the district. At the present day a fire has to be kept burning for a blacksmith, and the body is kippered.

At about four in the afternoon the ada brings her calabash before the gate, and a pot of palm wine, a cock, a mat and a plain white cloth, akwa ibe nabø, are brought to her there. The bead, which the eldest son has to put into the mouth of the eze at the moment of death, is removed by the ada and taken away in her calabash.

When an eze dies, all the eze remain at home till the body is underground, and this was also formerly the custom for ñkpalo. It was also forbidden for them to sit upon their uk bo (mud seat). They were, however, forbidden to weep, and if they violated this prohibition they had to chalk their eyes.

An eze was formerly buried near the point of land south of Asaba which is known as Onirhe, and the ground given for the choice of this place was that Nevise, the founder of the town, was said to have been buried there. In former days, after the burial of an eze, a watch was set by his own ebo (quarter), for one month, lest some other town should come and dig up the body to cut off the head as a trophy. When Afadie, the first asa bwa (head chief) died, they discussed whether he should be buried there, for he had been a great warrior, so they decided to make his grave inside the town lest his enemies should get hold of his head and make omalegwé with it. At the present day an eze is buried outside under his ukoni (kitchen), an ñkpalo under his ukbo and an ñkpese anywhere in his house.

If an eze dies during the seven days that he "rubs chalk" it is alo (forbidden) and the body is taken to the ajoifia (bad bush). Another statement was that they could wait till the seven days were up, pay money, nearly £2, to all the eze of the quarter, a ceremony called isu ike n'ani, and then bury the deceased as ñkpalo, not eze. This rite was explained as the taking off of the red cap, not from the body itself, for the dead man's éi represents him. The éi itself again does not

appear to be in actual use, for the *omu ojukwu* (a kind of palm leaf) is taken in place of the *éi*, which is kept on the mud seat called *ololumwo*. At some point during the ceremonies the *akbo* of the dead man has to be cut down by *odogwu*; he went to the spot once for a man with *obu* title and twice for *eze*. The first time he struck a ram four times upon the ground, the second time he struck it four times more and then killed it; if a ram could not be found, a slave, a he-goat, and a cock were killed. The body of the ram went to the *idumu* (sub-quarter), and *odogwu* received as his perquisite the head and genitals. An *eze* who dies while he is "rubbing chalk" cannot be recalled for second burial.

It may be noted in passing that the same rule applies to the *ezubwo*; but only if he dies during his years of office. He is taken to the *ajofia* and his *umunna* act as his deputies. At the close of his term of office they can celebrate second burial for him.

*Burial of orhene*.—More elaborate than the rites of burial for an *eze* are those of *orhene* or priest. The other *orhene* gather, and eight goats and eight fowls are sacrificed, but they may not see the dead man, who may not be touched, however, before the other *orhene* come. Before they go home they receive two chickens for the ceremony of purification. If this is omitted, they cannot eat at home.

After the *orhene* have come, the dead man is washed and dressed; camwood is rubbed on him, and chalk and eagle's feathers are put in his hair, the head having been shaved, save from the crown to the nape of the neck.

The hair is not thrown into the bush but kept in a pot, and when the head is shaved one goat is killed in the *ogige* (garden), one goat in the house, and one fowl for the *ibuma* (cloth chest), and one fowl for his *ébi* or feather hat. The *orhene* is said to be buried first of all in a coffin and then in a canoe; hence an *orhene* is forbidden to enter a canoe. If the dead man has a grown son he makes a small canoe and a coffin; the canoe is put inside the coffin and then the corpse in a sitting position. They say that the canoe is put inside the coffin in order that, when the dead *orhene* comes to the world again, the child may be able to travel in a canoe. The grave is dug behind the house of the *alo*se which the *orhene* serves. At some points during the ceremonies the heap of stones and mud, which is made by the *orhene* at his induction, is broken down, the last goat being sacrificed at the same time; this goat is known as *ibwaici obimwo* (<sup>l</sup> covering the heap of stones).

At some time after the completion of the original burial (probably nine days), the rite of second burial is performed. A gun is fired at dawn, and the rite known as *ukwenta* begins. Three goats are sacrificed, one for *ukwenta*, one for *ifejioko ono*, that is the tools used in the farm, and one for *ifejioko ubwo*, also known as *ifejioko ora*, that is an *ebwo* tree or stick in the farm house. On *ukwenta* day they dance round the town; this is known as *ukwota*; and all the *ebwo* are cut down which the dead man had planted as a fence, one each year. For the dance they take a drum known as *okanga*, a shield, *akbani*, a matchet, quarter staff and an *nkbo achi* or rain hat. The following day a gun is fired about 2 p.m. and men and women dance. Probably on the same day the

grave is rubbed (ite ine). This is explained as rubbing blood on the ukbo on which the mwø were kept.

During these ceremonies three slaves were sacrificed: one with his head cut off was buried in the gate, one in the place where the dead man washed, and one where his akbo tree stood. One slave had to be given a title, but apparently he was not one of those sacrificed. The goat was killed and the man put four tufts of palm fibre on each side of his head in imitation, probably, of the aziza ("broom") which the eze wears on his red cap. The slave did not sit upon the mud seat but near it, and for thirteen days ate food cooked in the ukoni.

During this time of seventeen days a man dressed up as maun and paraded the town. Ukwenta followed the maun and received money, so that he could eat food not cooked in the ukoni. The maun, who was also known as egūgū, was accompanied by Irokute. He chased women about in the evening time and about 6 p.m. retired to the okule, or house which was built especially for him. One statement said that he remained only thirteen days, and that the idumu cooked for Irokute on the thirteenth day. Irokute went early in the morning to the okule, so that the women might not know, and left again at night. On the day before egūgū games, all the widows of the dead man go and wash, and on the last day of the stay of egūgū they remain outside the fence (okpukpe) until dawn. On the following day egūgū gives them new husbands, telling them to choose whom they will have. This coming out of mourning on the thirteenth day of egūgū is called epu n'ononwu. All the quarter come and eat food and all the idumu lament, but all the women can go to market. The eldest son and daughter and the widows do nothing until egūgū goes, but the other children are allowed to work.

*Burial of Women.*—In the case of women the rites are less complex. The head wife of an eze is buried by her idumu, and especially by her eldest brother or his descendants; and the grave is dug behind the house. The wife of an ikpaloy or nkpeso would be buried in the house, as would be the case of all except the head wives of an eze. Where the brother of the dead woman has no house the grave is made on the spot where he will build his house later. The day before the burial of an anase (head wife) is known as ikbosu osu. The eze's mourning begins then and he cannot go out for seven days. After seven days have passed he may go out, but a servant must be left behind to carry on the mourning. Ashes are put upon one side instead of being swept away for seven days. On the seventh day the eze shaves, leaving a patch upon the crown, and the servant shaves on one side only; the children all shave, and the other wives leave a small piece unshaven. When a woman dies they bring her calabash, one hen and her loom sword to the market. The calabash is broken, the hen killed and the loom sword laid down. Then they go back and kill another hen. Her place in the market is taken by her daughter, but if she has no daughter anyone may take it.

*"Burial" of Absentee.*—Where a body cannot be recovered, as for example in a case of a drowned man, omu ojuku is struck four times on the bank of the stream and the dead man's name called four times. The omu is then covered

with a cloth and put upon a board. The ceremonies are performed for it as for a corpse. There is a saying, "om u ojuk u adad ani mpu, odani obul ozu" (om u ojuk u does not fall for nothing : if it falls, there is a corpse), that is to say, someone has died a violent death.

Where someone is buried in the ajoifia, om u ojuk u is knocked to call them for first burial after seven days, and this is probably the explanation of the contradiction in the account of the burial of an eze who has rubbed chalk, given above.

The child who does not know where his father and mother were buried, that is to say, if they were buried when the child was young, may knock om u ojuk u in the street and call to them to come.

*Burial of Debtor.*—With regard to the burial customs generally it may be said that a man who buries a debtor is responsible for his debt, and generally speaking the man who buries a person is also his heir. If a man buries his own brother the child of the deceased cannot demand the property.

Ordinarily a man's own brother will bury him whether he has a debt or not. This obligation, however, does not go beyond actual blood brotherhood, and the okpalumunna (head of the kin) is responsible for the burial of a man of the umunna. He will also bury a man who has a young son or brother, even if he leaves daughters, assuming, of course, that there is no idēbwe. In such cases, of course, he gets the property, if there is any, or pays his debts. People beg the mwō that they may be preserved from the fate of becoming ozu ɔkpala.

*Burial of nkpalø.*—At Okpanam when an nkpalø dies his wives lament him and his daughter or some other woman shaves his head. The corpse is then taken out and washed and laid on a mat and cloth. A goat known as ewu ikenga is killed, and the grave is dug by men of the same ebo while others make the coffin. They march with the okanga and coffin round the town and put the corpse in it about 5 p.m., singing burial songs; the grave-diggers and those who fill in the grave wash. At dawn the nkpalø of the ebo come and kill a goat for ifejioko. The okbosilo (an image like ikenga) is put before the ogwa (front house) and a goat sacrificed. Yams and koko yams are split, a food that is ordinarily forbidden for an nkpalø. Each nkpalø comes and puts an isikeli leaf in his left thumb and forefinger, claps his right hand on it, drops it and goes straight home without turning to look back; this means that they are leaving him and he will never follow them. Twenty-eight days later they dance. The widows mourn for twenty-eight days and shave half their heads; on the eve of their coming out the suitor provides food (uni onognwu) for the nkpalø of the ebo. When the widow comes out she washes and shaves all her head.

*Burial of Eze.*—In the case of an eze the old men (ikei) of the umunna wash him and at the same time the young men load the guns. When the corpse is brought in, it is put on a mat before the ukbo in a sitting position and they bring the dance ornament known as ubwome and the gbi or feather circlet for the head. The face is chalked and cowrie wristlets and armlets may be added.

also. While this is being done the young men are firing guns, and a door has been taken for a blacksmith to cut up and make a coffin of. The son and the umunna bring oil, a hen, mbaazu (dried fish), three ngugu (9d.) and seven yams for the blacksmith; the coffin is laid before the ukbo of the ogwa. A large goat known as ewu ikenga is killed on the right hand and shared by the nkpalø.

The umunna begin and the sons-in-law finish the digging of the grave; the umunna carry the empty coffin round the town and the ikunne, or people of the dead man's mother, carry it round a second time. The umunna dance till 3 a.m. and then put the corpse in the coffin and carry it to the grave, which is outside the house where he washed. Guns are fired and the grave-diggers wash. The eldest son blows a horn. The following day a goat is given to the nkpalø of the umunna, this because the dead man had made nkpalø before he made eze title. It is known as ikenga nkpalø because the son now takes his father's ikenga. In the case of a young eze the sub-quarter (idumu) will lament, but not in the case of an old eze.

Six doors are said to have been used for the coffin formerly, and it was about 4 feet 6 inches high; the grave was 7 feet deep and dug by two men working all the time.

The parade with the coffin was apparently after dark with torches. The procession was led by a slave wearing a rain hat with a fly whisk on his shoulder. He was tied to the qbwo, which represented ifejioko, and shot with a gun. The eze might not see this portion of the ceremony. Thus it was performed the day after the burial of the body, and the slave was buried beneath the qbwo. At the conclusion of the burial the ada cooked and offered to the mwø, then the idumu and others cooked and the okbosilo was split. An emphatic way of refusing a request is to say, "May I split my okbosilo, if I do it."

If the son has not already taken nkpesø title at his father's death, he goes to the okpaløbo for it.

The sons-in-law at the present day bring powder, cowries, and one goat if the bride price is finished; in former days they had also to bring a slave. If any of them have not completed payment of bride price they are reminded that it is necessary for them to do so.

At the end of twenty-eight days all the ebo take the okanga drum and dance round the town, women going also. Upon their return to the house the sons bring palm wine. Each son-in-law brings three ngugu (9d.), which is known as egomwø. The meaning of this is said to be that the wife may return to her husband free from mourning. A son-in-law remains in his father-in-law's house for twenty-eight days after death.

From the day of the death the wives remain in for seven izu (twenty-eight days). They then shave and begin their mourning, after taking off their beads and other ornaments. They wear only one cloth. They carry a seed known as osiosio and a small stick. The object of carrying this is to keep the dead man from troubling them; osiosio is a scented seed. The widow cannot sweep ashes out for six

months. If she knows that the eldest son is going to marry her, she cannot remain in the house, but gets a small house known as ononto outside. At the end of six months the nkpalø of the ebo come, two handfuls of mashed yams are put in a wooden dish and nkodo is filled with fish; the next husband buys the fish. These are cooked and given to the nkpalø. The head woman (adøbo) shaves the widow's hair and she washes.

*Burial of Eze.*—When an eze dies before he has completed his title, the body is sent to the ajøifia with a fowl's feather in the hair. Twenty-eight days later his umunna perform the burial ceremonies for him. Omu ojuku is taken to the road leading to the ajøifia and struck on the ground and the man's name called seven times. At the end of the street it is laid down, covered with a cloth, and then carried home. The coffin is made with palm mid-ribs and a mat and the omu ojuku put inside and carried round the town. The wives mourn twenty-eight days from the burial of this coffin. The grave is dug by the ebo outside the house; guns are fired and the people of the ebo lament, but the sons-in-law do not come. Those who have not completed bride price bring money and the others have to furnish the necessary articles for the ceremonies of itunne.

*Burial of Woman.*—The head wife of an eze is sent to her own people or is carried away by her own ebo. The women shave and wash the body and wrap her up in a mat and cloth. A goat supplied by the husband is killed as ewu ikenga and goes to her ebo. The husband also kills a cow and shows the meat of both goat and cow to her ebo. Her husband's people make the coffin and at two in the afternoon her ebo dance and cut down her banana and plantain trees so that she may have alibo in the world of mwø. The coffin is taken as far as the boundary of her own street, a knife is laid down in the boundary, a stick planted, and a goat killed known as ewu ifejiøko ikporo. Her ebo return with the coffin, and her husband gives them a goat, which is struck upon the coffin till it is dead.

If she has a son, he would proceed to bury his mother just outside his own house or on the spot where he will build his house; otherwise her ebo carry the body to their own quarter. After seven native weeks (twenty-eight days) the children or husband cook and the mourning is over. Her umunna take her ofo and kill a cow on it. The head is given to her child, who cooks it, dresses the skull and puts it on the wall above the mud image of the mother, and her ofo is placed near. On the day on which her children go to market they throw cowries and people follow them and dance. One hen is taken, and her calabash is broken after the hen has been sacrificed on it.

For another wife one goat is sacrificed to the ikenga and another to the ifejiøko. If she has a son who lives in his own house he may give a cow to the ebo, but this is not necessary. If a woman comes from Asaba her son may pay three bags or else bury the body in the woman's own house. The head wives of nkpalø and nkpeøe are buried like the ordinary wives of an eze. An unmarried girl is buried in her brother's house, if she has one. A cock may be killed before her ikenga, but if she has no ikenga there would be no sacrifice.

*Burial of Ago.*—At Isele Asaba I obtained an account of the burial of the head chief, the rites of which differ in some respects from those performed for ordinary persons. In former days his death was kept secret in the first instance and his slaves were seized in order that they might not escape for fear of being sacrificed. If the death occurred in the evening, the ozo members made a coffin of iroko during the night. Two boxes of cloth were brought, the ends joined and put on the shoulder of the corpse, one on each side, and a big cloth, mbuluku, was tied from the chief's waist to his ankles. He was first of all shaved inside the house by the adębo as soon as death had occurred, and then carried behind the house and washed. The body was put on the mapata, a circular box of iroko, rubbed with chalk by the young men, dressed and put in the coffin lying down.

The young men of the ębo then dug his grave in his sleeping room and beat ęfie drum before the ogwa. A situtunga (?) horn, known as okpili, was blown and various drums beaten, including okanga, ukoma, eguaka nabo and isi nibe. A slave was seized and sixteen torches lighted, and then the young men took up the coffin with four posts as support. Eight torches were carried in front and eight behind, and they went before Onitsha alone. This was known as to ono ękwulo, "opening the gate to the street." The slave was then killed and his head cut off to shut the road to the street. The coffin was brought back and one male and one female slave were put in the grave alive. The coffin was then lowered with a climbing rope into the grave, which was nine feet deep, and the grave was filled in. Those present shouted nkume ejiri, "a stone is broken," for no one could say openly that the Ago was dead, and until this ceremony was performed no one could lament. There was no offering of food at the burial. At dawn the whole town met together and the ękpalebo split the ikenga of the dead man, sacrificing one he-goat, one she-goat, one cock, and one cow. Four days later the ękwači was brought and a cow and other animals offered to it. The ńkpuluči were taken out of the dish and laid upon isikeli leaves. Kola, a cock and other things were then offered and the ńkpuluči split. Four ńkpulnči were taken to the new head chief to serve as his či. Four days later, again, one he-goat, one she-goat, a cow, and a slave were offered to split ifejigoko; kola, etc., was offered as before, and a slave killed and buried before the ifejigoko. Four days later a slave and other sacrifices were offered at the washing place of the dead chief.

Twenty-eight days after the death, all the people to whom Ago had given a wife met and sacrificed a cow and a slave in the open place before the ogwa. His relatives and the adębo went to the market place and threw cowries, which were provided by the sons-in-law. At dawn the next day the sons-in-law came and gave the due known as itunni, so that their wives might bear children. Each son-in-law brought one goat, eighteen fowls, and forty cowries for palm wine. Eight of these fowls went to the wife, and she offered kola to the grave. Each son-in-law then brought two cloths, one of three breadths and one of two breadths. The eldest son got the first together with the goat and ten fowls. The wife got the second and four hundred and twenty cowries. Each wife of the dead man got from

her father two cloths, one of three breadths and the other of two breadths, together with 1820 cowries. These they presented to the eldest son, and if he refused the gift it meant that he intended to marry them. Those whose gifts were accepted went back to their own people when they finished their mourning.

To rub the grave the following sacrifices were offered : one he-goat, one she-goat and one bullock. The old men of the town met and all the women of the *ębo*, and the animals were killed before the grave and their blood sprinkled on it. Two women knelt at each end and used their left hands to rub the blood on the grave. From that day onwards the grave was rubbed by the people of the house, who also brought cowries and fixed them on the top of the grave till all was covered.

Three months after death a he-goat and a cock were sacrificed "to draw the hands of the dead chief into the house." The eldest son cut kola for the image of his father; one woman and one man of the blood brethren of the dead man washed and dressed and brought a new mat, and it was their duty to offer the food provided. The peelings of the first yams were collected and boiled ; no goat may eat the yam peelings. The woman took up the pot and the man folded up the mat, and they went home. On *oyi* day the eldest son offered to his father one goat and put all the *mwo* in the *ogwa*. The sons-in-law brought yams, palm wine and cowries, the daughters brought food, and the people of the *ębo* were called upon for contributions. The head wife cooked and brought the food to the *ogwa* and in the evening the people of the *ębo* came to divide the food and the goat that was offered to the *mwo*. When they had done this they said, "Next year"—that is to say, when next year comes they will do the same again.

*Burial of Okpala at Isela Asaba.*—When a man who has taken the title of *okpala* dies, the body is brought out and the eldest daughter or any female in the *ębo* shaves the body and washes it and marks it with chalk and covers it with a cloth. Then the *okwęlegwe* of the *ębo* are called. A dog, a goat and a cock are brought ; the goat is sacrificed to split the *ikenga*, the dog is killed near the body and the blood allowed to drip in a circle round the body. In the case of a man who has an *akbo*, the body is taken to the tree with one ram. Cowries are thrown by the children and the ram killed to the *akbo* and the blood sprinkled round. Shots are fired at the *akbo* and the tree cut down, and sixteen cowries are given to each *omalegwe*. The *Iyase* kills a ram, a dog, and a cock. The *okpa ikenga* and cowries are sent to *Iyase*, who accompanies the coffin, which is taken four times to the road and back. The body is then taken up again and carried to the grave, which has been dug by the young men. It is put in a coffin three feet high, made by the blacksmiths.

The shaving of the body takes place in the part of the house known as *ęzi-obulu*, and the corpse is seated on a circular box (*mpata*). The *adębo* shaves a little of the whole, and some other woman finishes the task. Then the *ada* takes corn husks and smears chalk on the body from head to foot in spots. The box of cloth is opened and the eldest son comes and all the children to dress the body, which is put on a good mat and then wrapped in cloth. When the young men have dug the

grave they blow a calabash horn to call the dead man, and shout his af' *olu*, work name. If the dead man has a good son his *ikenga* is not destroyed, but only a slice taken off it, and the image is then handed to his son. The head of the dog is usually cut off near the head of the corpse, according to my informant, but on the occasion on which I saw a burial, which was, however, of a woman, it was done nearer the feet than the head, and no importance seemed to be attached to the place where it was performed. A goat is sacrificed to the feet, and *fufu* offered by a man and woman sitting at the feet; yams split in four, mixed with oil and salt are also offered, and thirdly *kola*, which is not eaten. The daughter of the dead man takes the dish and the pot and preserves it if it is a good one, but if it is a bad one she will probably break it. The eldest daughter of a family in the *idumu* takes the food offered in the broken pot and throws it into the bush.

On the day after the burial a piece of wood called *umuma* is used to beat the grave and the blood sprinkled on it. All the *okpala* come and mourn, and the meat of the goat is taken to the senior *okpala* of the *ebo* by the children, who sit down there and divide the meat. Mourning goes on for four days, and yams are cooked for the *itokwelegwe*, who dance at night, and for the *m wada*, the women of the family, who keep a fire burning on the grave to keep it dry. On the fifth day the *či* is broken after a cow and a goat have been sacrificed. Only one *nkpułuči* is cut up and each of the sons takes one piece. The meat of the victims is taken to the *okpalębo* and divided among the *ikpala*. Then a hen and a he-goat are killed in the dead man's washing place, and the meat goes to the women of the family (*m wada*). A cow, a goat, and yams are sacrificed to cut down *ifejioko* and a goat to cut down *očuču aja*, the sticks planted before the front gate at the annual sacrifice. A ram is sacrificed to *orhai*; one *orhai* is taken out and one image left for the eldest son.

Three months after the death a hen and a he-goat are sacrificed for *ini nni*, or drawing the dead man's hands into the house. The literal translation of *ini nni* is "to bury food." The eldest son provides yams and the *ada* brings a mat and two pots, one of which is for the yams. The yam peelings are cooked, beaten in a mortar, and all the *idumu* come and eat. One of the pots is set aside for the peeled yams; any *okpala* puts fire under it and all shout when the fire blazes up. The eldest son digs a small hole and the head woman (*ada*) kills a fowl to it. All the yams are offered and peeled yams and water poured into the hole. Then the *ada* takes her mat and pot, saying that she is going her own way, and the children shave their heads.

When her husband dies the widow brings a cloth of two breadths, and a cloth of three breadths, a dog, a cock, and a he-goat, and on the day of burial she cooks the food. She takes the beads from her neck and removes the ivory anklets. She remains in the kitchen (*ukoni*), where she wears bamboo cloth (*mpe*), and sleeps on the ground, and mourns for seven months. After this a small house near the bush is built for her, and no one may see her in that house; food is brought by a child, who knocks with a stick and puts the food down. When the child is gone the food

is taken in and the dish subsequently put out again and taken away by the child. When the head wife comes out, a big goat, known as *ewu isi kai*, is sacrificed. Her own people come and cook for her. The head woman (*adębo*) shaves her head while she is still in the little house, and the hair is buried in a *fo* market at midnight and a goat sacrificed by the *adębo*. No man may see the ceremony. The small house is then burnt, and she washes and can then mix with other people.

The head wife, when she comes out, goes to the house assigned to her by a doctor, who indicates the dwelling of one of the children of her husband. When she goes into the house a goat is sacrificed and a wooden image known as *uruči*, and said to represent her dead husband, is put in one of the small holes, known as *ufu*, in the wall; *uruči* means mourning *či*. After this the head wife goes to a bachelor's house till her hair is grown. Her second husband is, properly speaking, the son of her husband by another wife, or his brother, but the widow is allowed to choose anyone in the sub-quarter (*idumu*), and no bride price is payable.

All the other wives remove their ornaments and put on *mpe*. When the *adębo* shaves their heads they burn the bamboo cloth (*mpe*), and bury ashes in the *ajofia*. They remain in the house and mourn for three months only. They become free when the *ini nni* ceremony has been performed. The eldest son feeds them so long as they are in mourning. Each makes *uruči* and offers a he-goat. She goes to live in a house indicated to her by a doctor, which must be in the same *ębo*, and the son sacrifices to *uruči* for her. All the *ębo* come and eat, but only the *idumu* share the meat offered to the *uruči*. The widow cannot go to any man who has taken *okpala* title, nor may she marry till her hair is grown so that it may be parted.

Five days before his sisters return to their husbands, the eldest son cuts the *iroko* to make the image of his dead father. Each son-in-law brings palm wine for this ceremony, which is called *ofennu*, and also yams; and on the road he says to each person whom he meets, "Lead me to my father-in-law's house." Each *okpala* of the son's *idumu* who comes to the ceremony is provided with a dish of food. At about four in the afternoon the *mwo* are brought before the *ogwa*, and the *okei* of the *idumu* takes his seat. Each wife brings four *kola* and sits down on the *mpata*. She wears *ubwome* on her waist and makes *ekwelenku*. The head wife of the eldest son kneels and offers *kola* to the *mwo*, and then hands it to the eldest son, who again offers. All the wives perform this ceremony, and then the sons-in-law. All the *kola* is put in one plate and a young man takes a goat and cuts its throat. The blood is dripped on the *mwo*, but not on the *či*. The son gets up, puts his horn in his girdle, takes the knife used for killing the goat, and cleans it on the skin. Then he cuts the rope from the neck of the goat and puts it among the *mwo*. Then he takes the knife used for sacrifice and makes *enaka* with the eldest man present and at will with others. This he does by dancing and striking the blade of the knife against the knife held by the other man. When he does this people present say "ogazoi" (may he protect you)—that is invoking the blessing of his father. *Kola* is handed round, the hair of the goat singed off, and

the meat can be boiled. Yams are pounded by girls and men and the headwoman (ada) of the sub-quarter (idumu) asks for and receives a share. When the wives of the sons-in-law say that the food is cooked, boys are sent to call the umunna of the son; two people share out the food on wooden plates. The eldest son declares that the ada has taken away all the yams, and then tells a boy to bring out more yams and give them to his head wife. Food is shared in four portions in the first instance, given to the four oldest men; then the dividers bring water to the eldest son, who sprinkles it on the mwō, and also smears them with mashed yam and obobwo, which is eaten by the children. Some is put on a spoon, known as oziozi, and is eaten by the ikei. The eldest son puts some of the best food on the mwō; a young man takes it to the head wife of the son, who is in the ukoni.

When the meat is brought the dividers take the head and remove the jaw. The head is given to the okpalebo. The leg and the chest go to the eldest son, and the okpala whom he serves gets a leg, liver, and some of the side. The liver is put on the mwō and eaten by the children. The mwada get the waist, the young men get the kidneys and the remainder of the sides, one leg goes to the old men (ikei), and one leg to the children. A childless woman among the daughters of the dead man may eat her portion there, and take some to her husband; if she has children she will also take some home for her children. The children of the dead man's son scrape the meat from the goat's skull and tie it up with the same rope that they used before; the skull is then hung in the ogwa.

The following contributions are required from a son-in-law when his father-in-law dies. He gives one bag of cowries to his wife to go and see about the burial, and sixpence in cowries. If he belongs to the same town as his father-in-law, he fires one flask of powder when he reaches his father-in-law's house; if he belongs to another town, his idumu accompany him and he fires one keg. He also takes two cloths, one of three breadths and one of two breadths. The eldest son provides palm wine to the value of three oko (1½d.), or cowries to a corresponding amount.

In the case of a man who has taken okonti title but has gone no further, a stout sapling is cut from an ebwo tree and the mpata or okpala's seat is carved from it. Charcoal is ground and the body marked in spots with the charcoal by means of a corn cob. This is done by the king's slave, known as isokute, at midnight. Four fowl's feathers are put in the hair and the body is buried in the house. A goat which has not opened its eyes, a cock that has not crowed, and a chicken removed prematurely from the egg are sacrificed at the burial of okonti.

*Burial of Woman.*—At the burial of a woman the sub-quarter (idumu) lament and send to her own umunna to come. Her head is shaved in the part of the house called ɔziobuln, and she is also washed there. Then a mat is laid down and the body laid upon it with a cloth under the head, and cowries are put upon the wrists. Her umunna and ber ukunne—that is to say her father's relatives and her mother's brothers and sisters and their children—have to bring white cloth, which is used to

cover the corpse. A cloth is torn in pieces (Plate V, 3) and neck, chest, waist, knees and ankles are tied up and also the big toes. The head is covered with a cloth. It is probable that the thumbs are tied up, but I omitted to verify this. The grave is dug in the house by the young men of the umunna, and if she had any children, her children and her husband's umunna begin to dig the grave. The ikenga is placed near the feet and a goat and a cock killed to it, which is then split and left on the ground.

Her own umunna carry the meat to their headman (okei) and divide it; only the head goes to her children. Guns are then fired and food and one dog are brought by her own children; this rite (Plate V, 4) is called *elø nni oku ozu* (offering food of lamenting). Yams are roasted and split into four, oil and salt are added, and the whole covered with a plate. Four *ebwo* leaves are put on the ground at the feet, soup poured out and the soup pot broken; this is done by two women of the umunna. Kola is then handed to them, which they break and offer to the corpse with their left hand (Plate VI, 1) and then put on the ground. They then take *ebwo* leaves and cleanse their hands; the food is thrown into the bush.

After this the people present march round the corpse five times widdershins, one woman carrying the loom sword of the dead woman with a band of cowries round it. A dog's head is cut off near the feet (Plate VI, 2) and blood allowed to drip from the body, which is covered round the corpse; this blood is said to be for the dead person to take. The children boil and eat the dog, which is put on *ebwo* leaves until after the burial. Then the body is carried round the quarter (*ebø*) of the dead woman, and if she dies in her husband's *ebø*, round her husband's *ebø* also. A door is used as a bier. Then the corpse is put down and carried into the house. After it has been put into the grave, the grave is filled in, and the water-pot used for storing water brought to the door and thrown out and broken. The cowries are removed from the loom sword and the grave-diggers wash their hands by rubbing them with *ebwo* leaves (Plate VI, 4) and then pouring water over them from a calabash. They wash a second time when they reach home.

*Burial of Okpala.*—At Onicha Olona for the burial of an *okpala*, after his relatives have lamented, other people come and the body is washed in the *eziobulu*. It is then taken into the house and laid on a mat and shaved by a woman; for this the body is lifted up. Then a cloth is laid down and a mat and cloth folded over the body and the whole tied up in a cloth torn into strips. The ikenga is brought before the body and a cock and goat sacrificed to it, and the image is then given to the son. The cock and goat are cooked and shared out to the ikei, onotu, ikpala, *okwølegwe* and the son. A palm branch is taken to measure the body, and the grave is dug by the young men of the *ebø* in the *mbwolong*. The young men beat the *okanga* drum and dance round the body clockwise. A dog is brought, the head struck off at one blow, and the blood poured upon the body. Then the young men take the body to the grave. The water pot is thrown upon the roof so that water runs upon the corpse and the water pot falls and breaks. The feet are knocked four times upon the roof and the fragments of the water pot thrown into

the bush. Then the grave is filled in, and the grave-diggers stamp on it, saying, ogolio lio lio, and then the wife knows that her husband is dead. The grave-diggers take ębwo leaves to wash. Four days later the widows, who had cooked in their houses, bring food to offer on the grave. Kola is offered with the right hand, and they say ękwęneya n̄wu, n'obun oku mwadu nibe atulu ji mbwaku, "Let her not die, it is not the fault of each other that gathering yams is poor." Food is then offered and the same words repeated. This sets the widow free from her mourning; the head wife mourns four days more.

When a man dies, a widow takes off all her ornaments and her cloth and puts on an old cloth, and if she has not got one old enough, she rubs mud on a new cloth. She lives in her own house and sleeps on the floor. She carries the osiosio seed, which is forbidden to an okpala, in order to keep her dead husband away. He comes in a dream, but does no harm, but the widow cries when she wakes up. She is allowed to leave the house, but must carry the osiosio with her. After her husband's burial the widow is led by one of her husband's daughters to her place in the market; no man must see her. I was told that she did this because when her husband took okpala title she accompanied him and went to her place in the market. Then all the headwomen (*ada*) are brought by the ɔm̄u to the widow's house; they cook mbuazu in broken pots in the old cooking place; then all the pots are broken, the food is left and the kitchen is broken down. The market queen (*om̄u*) then calls upon her to choose a husband, but if she chooses no one the people present cannot eat. Under ordinary circumstances she cooks for the women to eat and the *om̄u* gives a razor to a woman to shave the woman and a thread is tied on her neck. She is then sent to a bachelor's house and remains there three months.

The *adebo* may also give a chewing stick to the widow, saying that the eldest son gives it to her; the widow throws it away and is then the wife of the eldest son. Before coming to him she performs the ceremony called "ibu akwu luz ono," "carrying crying to the house," that is to her own people; a man selected by herself comes to her and has connection; he must not be of the *ebo* she has married into, nor of her own *ebo*; and no one knows who the man is; they explain this ceremony as being to drive away the *mwo*.

Before entering her new husband's house, he puts yams and other food at the door for her to take. The thread which has been put round her neck during the mourning customs is cut off. When a widow re-enters the market, which she may not do until her hair is grown long enough to be plaited, she leaves her old seat and takes a new one.

At some period after the burial of an okpala, probably a year, his osisi and a he-goat are taken before his ębwo fence. All the ębwo sticks are rooted up and laid down together with the osisi. A goat is killed and blood run upon both; then the osisi is cut up. From this time onwards the okpala's son takes no more share from his father's title.

After the ceremonies for the okpala a further set of ceremonies may be

performed if the man had taken ozo title. A dog, a ram, a cock, a tortoise and a snail are sacrificed on the tools and the forge is broken down and burned. The son takes the tools and provides food for one day for the ozo members and takes the place of his father.

A certain number of people are not buried but sent to the ajoifia; among them are those who die of smallpox, known as isamisa or mbwaluku, those who suffer from leprosy, arōiča, anyone who swells up and dies, anyone who dies of sasswood, inyi, anyone who dies in nzu. In the case of the last three ọmu ojuku is taken, struck upon the ground and buried and when they do it they say, "we want to bury you, come back."

Under ordinary circumstances children are buried in the house under the eaves, and a small baby in the side of the street where the grass is heaped up, but a child that never cried is sent to the ajoifia. If a boy has made onabwa or sleeping house, he may be buried in the house.

*Burial of Woman.*—For the burial of an old woman the following is the procedure. A mat is laid on the ground just outside the door. The body is brought out and laid upon the mat with a cloth underneath; the head is only partially shaved. The ivory anklets are taken off and cowries put up the arms to above the elbow. Then a fowl is brought and its feet washed; it is sacrificed on the ikenga. The neck is first of all plucked, while its beak is held so that it may not cry out, and the feathers are put on the ikenga. Then the head is cut off, the blood collected in an ẹbwo leaf and poured on the right shoulder and arm of the corpse; the body of the fowl is kept outside the house. Chalk is then sprinkled on the ikenga and a goat's throat cut and the blood poured as before on the right arm; then the head is cut off and put upon the ikenga. The bodies of the fowl and the goat are put in a basket and the handles of the basket tied with string. The thumbs and big toes are next tied and a white cloth put under the body. Then one cloth is put over the body, one over the lower limbs, one over the lower limbs and body and one over the head and body, and all is tied up. A woman then takes the goat's head and the fowl's feet to another house. The corpse is then rolled up in the cloths, a mat is wrapped round and tied with palm fibre, and all is put upon a bier of midribs. At this point a tornado came on and the normal course of the ceremonies was interrupted.

The husband of a woman keeps a fly whisk upon his shoulder and uses a dirty cloth which he retains three months; he sits in his house four days and sleeps on a mat. The daughter cooks food and puts it on the grave; this ceremony is known as ipu n'on' ozu (coming out of the house of the corpse).

*Burial of nkpalø, etc.*—In the presence of divergent elements in the popular beliefs, the burial ceremonies at Ala are less uniform than is usually the case. The following is an account of the burial of an nkpalø. The umunna take the body out and wash it after it has been shaved by the headwoman (ada). An ibenabø cloth is tied on the waist, a mat is put down, then a cloth and the body on the top. Eyes are chalked and cowries put on the arms from the wrists to the shoulders,

The *nkpalø* takes a cock to cleanse the body, and kills it by pulling off the lower jaw. Blood is rubbed on the eyes and feathers put in front of the ears and on the bridge of the nose of the corpse. Another kills the goat and puts blood upon the right hand; the cock and the goat are taken to *Iyase's* house. The grave is dug by a man of the *umunna* before the *ukbo*. On the following day the son or the *umunna* beat the grave hard, and the *mwada* make a fire on it and rub it with chalk. The son-in-law brings powder and palm wine only for the first burial, but if he has not completed bride price, the dead man's *umunna* call upon him to finish payment. He brings his *umunna* to help dig the grave.

At the second burial *isokute*, who is said to be the father of the *mwo*, sits on one side beating a drum, and maskers (*maui*) come out and dance; the second burial appears to be celebrated in the dry season. The sons and daughters sit in a row on *akboči* and throw cowries to the dancers, saying *nnam obu ji, nnam onw ego*, which means "my father grew yams, my father had money." The daughters shave their heads unless they are *omaku*, head wife. A head wife (*omaku*) shaves part and leaves a patch on the crown. Sons from sixteen years of age downwards also shave their heads.

Small children that have no teeth are buried at the edge of the street, for they do not know anything; those who have teeth are buried under the eaves. If a body is not recoverable *omu ojuku* is cut, struck five times upon the ground and the dead man called home. They say *bia, ainy akwadebe*, "come, we are ready." The *omu* is then wrapped in a cloth with cowries round it and buried in the house; *uke* is made for *oxu enini*, an unburied person. The eldest son of the dead man, or if he has no son, one of his brothers, takes *ebwo* to make the image of the dead man and puts it among the *mwo*; they call the dead man and say that they have made his image.

The widow gives an *ibenabø* cloth and three *ngugu* to the son of her husband and throws cowries when the body is being washed. After burial she goes to her own house and does not wash; she laments morning and evening for three months. She rubs mud on her cloth and smokes another over the fire for three months, which she uses for a walking dress. She may not go into the open street but only into the area specially associated with her own *umunna*. No man may enter her house until the second burial, which may be a year after the death. Three months after the death the headwoman (*adøbo*) shaves her and receives sixty cowries. When she leaves her house for good anyone may take possession of it.

In *Ubwolu* quarter the eldest daughter of the dead man shaves his head and his eldest son and daughter wash his back; then the *umunna* wash the rest of the body. The headman (*okpalebo*) kills the cock and the goat.

The widow comes out when they bury her husband and goes back to her house at night and stays there for nine days. Then she chooses another husband, who builds a small house for her, *ono ičakwa*, in which she stays three months, food being provided by the suitor. The *adøbo* shaves her head and breaks everything that she has used; the house is burned together with the hair of the widow, her

cloths and so on. Before the body is washed, a fire of obwankolo is made, and the body is kept near it. When the ceremonies are completed, the wood and the ashes are thrown away.

In Okpologu quarter, which came from near Ida, an Igara town, there are very different customs. They put cowries on the arm, but this appears to have been derived from their Ibo neighbours. The head is shaved by anyone, and the body is washed by the idamu; a cock is taken to cleanse the body and passed round the head by members of the same title. The ceremonies for a man who has taken a title last longer than for another man, and his body may be kippered. In other cases the grave is dug three feet six inches deep, and three sticks are put on it, one foot above the bottom. The body is put on the sticks, covered with earth, and fire put on the top. For second burial, which may be from three months to a year later, a mat is made on eke day and buried on oyi day in the earth above the first grave.

Another account said that at the second burial the grave was opened and the bones taken out, then the grave was dug deeper and the mat put in. Seven goats and one ram were sacrificed and the remains put back in the evening. The day after second burial a hole about one foot deep is made near the head for offerings of food. The mwo or masked men dance in the courtyard of the dead man. On the tenth day the widow chooses a husband.

*Burial of nkpalø.*—At Ibuzo, if a man's son is young, he calls the ɔkpalebo to help him to bury his father, otherwise only the umunna assemble. Two men hold the body up while one washes it. It is then laid on the two mats, known as ute and agene. Cowries are tied on the arms and the body is put back in the house in a sitting position against the wall; it is tied up in a cloth with strips of cloth as rope. Chalk is thrown on the body and the eldest daughter sits near it and fans it. A red cap is put upon the head of a man who has taken obi title and his eyes and feet are chalked. A cow and a goat are killed as ikenga outside the house; the blood from the goat is poured on the right hand and the ikenga thrown away. A goat is killed and a coffin made of iroko, five feet high, and men carry it round the town singing okwero ɔbu; and they answer aiyo, which means "we cannot carry; alas!" The coffin is put before the ɔbwo fence and carried four times backwards and forwards through the gate. Then the head wife is brought out; she walks eleven times to and fro before the ɔgwa. The goat is taken before the mnd seat of the mwo and beaten upon the ground till it dies. The cord anklets worn by the head wife are cut off. A goat is killed at the slab behind the house. Then the body is put in the grave, which is smoothed eleven times with the hand. The grave-diggers rub ɔbwo leaves and wash and drop water on their hands and on their chest. Then the umunna dance and sing yaya k'oje k'ona, onye melo gnaba, "he is going, let him go, who pleases himself, he goes." A cow is killed on the grave for its ini. The eze of the ɔbo do not go to farm for twelve days. The men of the family cook in turn for all women who have married out of the quarter. They sit down in the house of the

dead man for twelve days, and then their husbands take one ngugu to the headman (okpalebo) to take their wives away. The eldest son of the dead man brings a dog and a chicken to purify the house. The oga of the nkpesé passes them round the heads of all the umunna widdershins. The dog is killed in the street and then taken to the headman (okpalebo), and at dawn all the men who have taken titles divide the meat. The wives then begin to mourn.

When the husband dies the wife puts on dirty cloths and remains in the house lamenting, but up to the end of the twelfth day she can go to any house in the umunna. A head wife mourns thirteen months and an ordinary wife seven months, after which the ashes are taken to the ajoifia and the widow shaves near the ajoifia, washes and changes her cloth. On the twelfth day a separate house, called on' ozo, is made by the umunna for each wife.

The mother of the eldest son is married by the brother of the dead man, but all her property remains with her son. In the case of an old woman her son may build a house or she may go to her umunna. In the latter case she will be buried by her own brother.

When an nkpalø dies no one of the quarter can go to farm for two days, and the umunna of the dead man remain at home for seven days. In the case of an nkpesé the ebo remains at home only one day.

A woman who has a son is buried in her son's house. If she has no son she is taken to her own people, to whom the husband gives a goat and three ngugu (9d.). She is buried behind her brother's house. Her ebo and her husband's ebo may not go to farm for one day. In the case of a child the quarter do not go to farm for one day; in the case of a baby the umunna do not go to farm for one day.

The following are sent to the ajoifia: people who suffer from smallpox, leprosy or swelling of the body, a man who has committed suicide on account of disease, an eze candidate before he has made iči, a man who commits adultery with an isimwo or wife of an obi, and a woman who dies who is mourning for her husband.

In the case of an eze candidate a goat is killed "to bring him down from his mud seat" (ukbo), that is make him nkpalø again; then he can be buried. All the property of a man who is sent to the ajoifia goes with him, but they accept his goats and cows, the most valuable part of his property, because these animals have no dealings with him, they walk about.

*Burial of Ozo.*—At Ogwashi the children and brothers of an ozo member wash the body, but the eldest daughter shaves it and washes the back. After cloth has been brought the ebo come and the corpse can be tied up in the cloth and mat. All this is done in the court behind the house. The body is then brought into the house and a fowl killed on the ubwome or dance ornament, which is then split. The body of the fowl is given to the ikei kaini, old men. A goat and a cock are sacrificed to split ikęngá, and a cock to split ńi. The okwači is kept by the son and one nkpułuči goes to the nwago of the dead man. The

grave is dug inside the house and each man of the *obo* brings one yam. Six days after burial the daughters and sisters of the dead man throw cowries in the market. The *obo* stay in from work one day and the *umunna* four days.

When her husband dies the widow laments and brings *akwači* after washing, that is a good dance cloth. The head wife also provides one dog, which is killed and the body is eaten by the *obo*. The widow sits in a house made of palm leaves, known as *onø ogidi*, placed behind the husband's house, and no man may enter it. She wears *mpe* cloth and takes off all her ornaments as soon as death occurs. She may walk about but not go to farm or market nor carry a load. She carries a small basket about with her with her *mwo* inside and sleeps on the ground. Early in the day when her time of mourning is over, the women of the family (*mwada*) take her along the *Ibuø* road; she laments but they dance. Before they bring her out she notifies the market queen (*omu*), who sends instructions to the *ada* to act. The widow takes ashes away to the *owełe* and the *ada* burns her house and her hair. Before she remarries the widow offers two goats to *uruči*. She hangs the basket in the roof and offers a hen to it annually. A woman who does not mourn for her husband has her house broken down and may also be fined three goats. If the fine is not paid she cannot get a husband in the same quarter. If the period of mourning is finished, she cannot start her mourning instead of paying the fine.

When a woman dies she is buried by her husband, that is to say, he provides a dog, a cloth and a mat, but the rites are actually performed by her own people, unless she has borne a son. The husband may not do any work for three months and sits in the house; the ashes are kept. Then one of the daughters sweeps the house and takes away the ashes and the remaining wood. The husband sleeps on the ground, and at the expiration of the mourning shaves his head and changes his cloth.

*Burial of Okpala.*—At *Ubuluku*, for the burial of an *okpala*, all the other *ikpala* come and sit in a row. The sons and daughters wash and dress the body, and a goat and a cock are sacrificed and the blood sprinkled on the right hand. After this the coffin is carried round the town, cowries are given to each *okpala* and guns fired to announce the death. Young men dig the grave. After the body is brought back after the procession a hole is broken in the wall of the *ogwa* and the corpse passed into the *ogwa* through this hole. The goat and the cock are sacrificed there and the blood smeared on the corpse. The wives cook and bring food, which is put near the corpse, and the *ada* takes the food provided by the head wife and puts it on the coffin. She washes her hands and lays the food at the feet of the corpse. She, or another woman, cuts the food in four and puts it down before the feet. The soup pot and the wooden dish are broken. Then the body is brought back to the house and the chief (*obi*) sends a lump of chalk. Each wife and child brings cloth. In the morning the *obo* is called and in the olden days a slave prepared for sacrifice; his head was shaved and he was washed; two men carried the body to the grave saying *onao onao* (he is going),

four times; then the itainya mili, or water pot, was brought and broken before the house. When the corpse is put in the grave they sing: oči nya maya lao, "palm wine man, give him to drink," and tread the grave hard. A cow and a dog are killed upon the grave, and the leg and the head go to the man who is burying the body. On the following day the ceremony known as epu on'ozu is performed, which means that food is cooked for the young men. The wife marches round the house lamenting; then she gets her ono ogidi, in which she remains for eleven months.

The eldest son may not see the wives. Isokute takes the head wife to the ajoifia and shaves her head, for which she pays three ngugu (9d.) to the chief (obi). One he-goat is killed in the ajoifia by isokute and the head buried by the woman's hair. Then the woman puts a cloth upon her head and goes home to her son's house. The ordinary wife remains seven months in a bachelor's house and then the ada ong shaves her head. She takes off her cloth in the ada's house and throws her hair into the bush and sends cloth and four hundred cowries to the adebo. The head wife may leave her ono ogidi after three months and go to a bachelor's house. The small children of the dead man and of his brother shave their heads.

If an unknown man dies, they would not bury his body for it would be stealing. They leave the corpse on the road by which he came, and his host keeps his property.

*Burial of Woman.*—If a head wife dies, the ikpala come as for her husband. Her own people and the qbo of her husband dance, and she is taken to her own people, or buried in her son's house according to the circumstances. Her husband gives a cock to her people as a sign that he has taken up her potrests. A hen to kill on the grave is also given, known as "okoko ewo arq," "a hen for washing the body." The husband remains in the house twenty-eight days with a fly whisk on his shoulder, and then shaves part of his head and throws away his fly whisk and burns his cloth in the court.

The ēi of the head wife is split behind the ogwa. A goat is brought and a red yam, known as mbo, is split into four, one piece for each nkpułūči; the blood of the goat is smeared on all. Three are thrown away and one is split and thrown on the ground; the liver, stomach, etc., are offered to the ēi. The first son washes the okwači and keeps it. A leg and the skin of the goat go to the okpalębo, a leg and the head to the children and the rest to the ikpala. The procedure is the same in the case of a man's ēi.

When a child can walk it gets a small ikenga, which is split at death. An adult buys a big ikenga, which is put in an okwa and the small one in front. The large ikenga is kept by a man's son after his death, and a cock and a goat sacrificed to it.

*Burial of Man.*—At Idumuje Uboko the body is washed in the yard and the umunna purify it with a chicken. The hand of the dead body is laid upon the ikenga and a cock and a he-goat killed. The grave is dug in the ogwa. The young men are called by blowing a calabash and act as grave-diggers, after which

they wash with water, kola, ok ba leaves and one grain of alligator pepper, and the next day the dividers (*oga*) beat the grave and a she-goat is killed. The *ikpala* may not go to farm on the day of the death, and each pays twenty cowries when he gets a share of the meat; the headman (*obwelo*) offers kola to the dead *okpala*, and says *okpala bainy' ubwo, ya ebune, okpala bainy' qifia ya ebune*, "if an *okpala* goes to farm, let it (in doing so) not kill him; if an *okpala* goes to bush, let it not kill him."

In the dry season a day is fixed for second burial; and on the ninth day the bones are taken out and put in the canoe (*obwo*) and then buried deep in the earth. A cow is killed on the *či* and then a goat is sacrificed to put out the fire which has been lighted in front of the *ogwa*, for a fire in that position is forbidden to an *okpala*.

In the case of a man who has not title no *obwo* is made, but a frame work called *obwo*, for which *m bu* wood is used. There are holes at each end and cross pieces for the head and feet. It represents the dead man, but it is not buried. Cloth is put in a shallow grave in its place. The *obwo* itself may be used by the daughter for winding cotton or any other useful purposes. Food is offered to the foot of the frame (*obwo*), and a fowl and dog sacrificed. The frame (*obwo*) is taken into the house, and the cloth, which has been put on it, is removed. A kid is killed on the grave and its leg tied to the *ofo*. Then a line of chalk is drawn and the *ofo* struck upon the ground as they make each step forward. Where an *obwo* is made, that is in the case of an *okpala*, it is taken to the market and then put in the court of the women's house. The widows and women of the family sleep outside with the *obwo* and also the slave who was formerly buried with it. The next day it is taken to the dead man's *orhai* and left till midnight, when it is brought out again and buried. A kid is killed at the fence, *očuču aja*, and another to cut the *osisi* which the *okpala* used to dance with. At the second burial all the widows bring kids; the kids of those who are not going to remarry are not killed. The *ada* shaves the widows' heads and the women of the family come and sit down with her in her *ukoni*. At midnight the widows are taken to the water to wash, and at dawn they go to farm. Each carries a load of yams home to be offered to the *mwo*. Each ties *azili* (cotton), and is then free to act as she likes, though she may not run to another town. In three months this cotton is loosed and they go to their husbands. When they shave, the hair is put on their old cloth and all is burned outside; a piece is cut from her food calabash, from her cup, from her pipe to show that she is cut off from her dead husband. This is called *epu aka okei*, "coming out of the man's hand." In the case of a woman *okwe* is taken to make the frame (*obwo*) of the dead wife, and in every respect the ceremonies are performed as for an *okpala*. For an ordinary wife the *obwo* is taken to market. Cloth and a kid, however, are brought; this is called *usolo*, or *ime emume*; one leg goes to her sons and the rest to her family.

They send to the *ajqifia* those who die of *di alo* (or *aro*), which appears to be consumption, a widow for whose husband second burial has not been performed, and a new-born child, which is put in a pot or basket.

At Idumuje Ono, after the washing and the shaving of the body, cowries are thrown. Each child brings an ibat<sup>9</sup> cloth. New cloth is cut up to tie the corpse; the eldest son cooks outside and a man and woman of the quarter offer to the corpse, which is so placed that the legs point to the house. Four balls of food are made, and first the man and then the woman dips them in the soup and puts them on the ground; no one eats them. The woman breaks the pot and the man breaks the plate. The young men (*itokwelegwe*) act as grave-diggers and bearers, and on the next day rub the grave. The headman (*ada*) of the umunna dries the grave with fire (*ikboko ozu*), and sleeps there eight days.

A year later, second burial is performed. The son offers chalk and kola on the grave and the sons-in-law come with cowries for the wives to throw, after which they return, though their wives remain. Four days later a dog is killed and the blood sprinkled on the grave. Four days later again the head man and woman (*okpalobo* and *adebo*) come, and a fowl and a small pot are provided. The fowl is killed and the head and the leg put in the pot with *ososo*, and the pot is boiled outside. Then the mortar is covered and the pot turned on top. Then the eldest son walks round the mortar and pounds, and the eldest daughter makes a hole and puts the food in. An ants' nest is put on the hole and the *ofo* on the top; then a line of chalk is drawn from the house to the place where the *ofo* is to be put; this is called *isebe aka ono*. The *adebo* takes the *ofo* in, and she and the *okpalobo* offer.

In Obwaku quarter, after second burial, a pepper dish is covered outside, kola offered and oil poured over it. Then a stone is put on the top and it is left four days. At night one goat is brought, a rope tied round its neck and its head cut off; the blood is run on the pepper dish and the stone taken away. The meat is divided, three legs to the quarter and one to the son, who shares with the headwoman (*adebo*) and headman (*okpalobo*). The pepper dish is split and thrown into the bush.

In Urhe quarter a small open pot is brought and covered inside the house and dog's blood poured over it. A pepper dish is covered outside the house and goat's blood poured over it. At night a fowl is killed and the body thrown through the leaves which form the thatch. In five days a calabash is half filled, the idumu march round the town with it and then break it on the grave. The *ada* of the idumu rub the grave, and one goat is sacrificed for *isebe aka ono*; the pot and pepper dish are thrown away.

At Ani *Ofo*, after washing and dressing the body the grave is dug in the house in the middle room, about five feet deep. The umunna choose the man to sacrifice, and he kills the goat and a cock and runs the blood on the right hand, which rests on the *ikenga*. Kola is offered to the hand, ifu aka *ikenga*, and food offered to the feet. The *itokwelegwe* act as bearers and afterwards wash with *ebwo* leaves and water. A big kola leaf is put in the basin with soap, and they take this water in the mouth and spit it out, saying, "Let owo go"; *owo* they explained to mean the smell of the dead body. The next morning the grave is smoothed and a fire lighted on it by the daughters, who go back to their husbands in three months.

Each widow brings cloth for the burial and food; an ase's food is offered, and a little of her cloth put on top of the grave; the remainder of the food is eaten and the cloth used to cover the dead man. The widows tie dirty cloths and may not wash; each remains in her own house until second burial and may not talk much.

At second burial they take the obwo, six feet long, on afg day; it represents the dead man. On the following day people gather in the dead man's house and food is given to the ikpala, to the ndicie, to the young men (itokwəlegwe) and to the mwada. The frame (obwo) is put in the ogwa and women rub it with chalk and put red spots on it; it is then carried to market and children throw cowries; those which fall on the frame (obwo) belong to the itokwəlegwe. In the evening it is taken to the head wife's house and all the widows sleep there. On the evening of nkwo day the obwo is taken outside and the widows called. Each bends over backwards so that her head comes near the feet of the obwo; this is called iya isi.

The obwo is put in the same grave as the corpse, but not so deep. Five days later men come and dance, and the following day draw figures of the dead man in the street with chalk. The children of the dead man throw cowries and say that they are taking their father into the town. This is the end of the burial.

Five days later the widows' families come to dance, and at 12 p.m. each goes to the water and washes. On the way back they lament, but cease as soon as they reach the house. The next day they are taken to the husband's farm and tie a load of yams, which they carry home. They cook the yams and the okpalumunna offers it to the dead man. (It should be observed that a woman never carries a load of yams while her husband is alive.) If anything forbidden has been done in the town, anything, for example, which is forbidden for orhai, a body cannot be buried. It is put upon planks and covered with mud, and a fire kept burning underneath to dry it.

At Ukuzu, after washing and shaving, the jaw of a cock is broken and blood dripped across the face from ear to ear. A goat is killed on the ikenga and blood dripped from an ebwo leaf on the right hand of the corpse, which is then wrapped in cloth and folded up in a mat. While this is being done, it is necessary to face the corpse and stand on the left-hand side, so that the head of the body is to the right. To tie it up an ibenabø cloth is divided into seven and they begin to tie it from the head. In the case of a man who has not taken okpala title, the grave is dug and the body buried before any food is offered. On the fifth day a fowl and a goat are sacrificed and the fowl's head put in a small hole inside the house. For an okpala an iroko tree is felled to carve the frame (obwo), which here serves as a coffin. A goat is sacrificed and the blood run over the lid of the coffin. At some time during the next fourteen days the headman (okpaløbo) sacrifices a cow with a goat tied to its leg outside the house. Then the goat is taken and sacrificed inside the house on the grave. On the day they kill the cow, men and women who have stayed in the house from the seventh day onwards go to the stream and wash. They bring back calabashes half full of water and pour water on the grave.

At Obompa an omumwo has no second burial. A cock is killed on the ikenga and the blood poured from an ebwo leaf on the right hand. If, however, a man has a son a second burial may be performed and one goat is killed. This is called izolu ukwu ani, resting the waist upon the ground.

Those who have performed the idi ebunu come. Water is poured from the roof so that it falls on the dead man's eyes. The heir takes a cock to orhai, comes to the corpse and goes back seven times and finally kills the cock. This is known as ibupu yala yala, which means taking yala yala (which they could not explain to me) from his eyes, for otherwise the child to whom he becomes *éi* would not be able to see properly.

Another account gave more in detail the method of performing this ceremony. Omu is tied on the cock's leg and the cock hung from the roof. Water is then poured on the omu so that it runs on the eyes of the dead man. The cock is then killed and eaten by the children.

For the burial of an okpala the young men (itokwélegwe) make mbwidi, a hollow under the mud seat (ukbo); a fire is made on the top and it is rubbed with chalk. Two goats are sacrificed to the ikenga and one to take down ofo. Three years later the itokwélegwe carve a frame (obwo) of iroko. The mbwidi is broken and the bones of the dead man put in the obwo. On the fifth day the obwo is taken to market and a goat killed before the alose anabwa. The grave is dug in the house and the bones buried in it. All the ikpala shave.

A woman cannot be buried permanently in her husband's ébo, but mbwidi may be made there and the bones removed for second burial.

At Ubulubu, for the burial of an okpala, after washing and shaving the corpse, it is placed upon the mat and the two eyes chalked. A fowl is passed round the body and the blood dripped upon the eyes; then the fowl is hung from the idegi degi, ends of the roof mat. The small children bring a small cloth known as mpe, grown children ibenabg, and the first son ibenato. The toes and thumbs are tied and an eagle's feather put in the tufts of hair. Ebwo leaves are put on the feet of the corpse and two people wash their hands and offer kola, which they chew and put on the ebwo. Then mashed yams are offered by the okpala of the subquarter (idumu) and the food is left on it; no pots are broken. They touch the forehead of the dead man with cowries and lay them on him, saying, "don't let us die." Before putting the corpse in the grave they walk round clockwise and sing óllyib.

After the grave is filled in they stamp it singing di di iya; and when they weep they wipe their tears and drop them on the grave. They then pass sand round their heads, first with their right hands and then with their left hands, saying, "don't let us die, don't let us fall sick." When they take the corpse to the grave, the water pot is thrown on the roof and the corpse is carried four times feet first under the dripping water. They say that he is drinking the water that runs from the roof (this is done also in the birth ceremonies). After burial the

grave-diggers pass the rope, which they have used to lower the body into the grave, round their heads and throw it away.

At burial the *ofo* is taken down and put up again on the seventh day by the person who has the son in *oma*. When they take the *ofo* down they say, "my father, you die, do not let us see death." The *ofo* is put on the floor and a cock is sacrificed to it and it is left lying there.

Second burial can be performed at any time. Wood is taken to make the frame (*obwo*) and cut flat; a palm leaf is put on each side and the whole covered with *ibatq*, chalk being put in the middle; three cowries are tied on; the chalk represents the dead body; the whole is carried to market and cowries are thrown. *Ibatq* is taken off and the chalk buried in the house on the top of the old grave; they kill a cow and run blood on the chalk. To rub the grave one of two staves (*osisi*) is cut in two after a goat has been sacrificed. After this a chalk picture in the shape of the body is drawn in the street with the feet towards the house; then a line of chalk is drawn to the *ofo* in the house; this is called bringing the man into the house and is done on the last day of burial. After this the headman (*ok palebo*) gives a new *ofo* to the man's son after counting eleven times. Three months later when the wives shave, the water pot and the soup pot are broken on the hearth where they cooked.

As soon as the husband dies the widow sits down in the *ukoni*. She takes *ozala* (aloze) on her head; she does this so that her late husband may not kill her. She grinds charcoal and rubs it on her forehead, holds *osiosio* in her hand and sits near a fire. At cockerow and at 6 p.m. she laments behind the house; this goes on till second burial. After three months she may go to market but still continues to rub charcoal, and may not shave nor wash her cloth. After offering kola to the *mwo* she sleeps on the mud seat (*ukbo*). The *ada* chooses a husband for the widow, but if she refuses the *ada* will refuse to shave her. Just before a new moon comes out she puts a thread on her neck; after this she is free for about five weeks, but before she goes to her new husband the *ada* takes the neck thread off and throws it in the bush. After the death of a man, all the *umunna* remain in the house seven days, that is to say, they may not go into the town, but may get wood, water, etc.

If a man has been drowned they hold chalk to the sun and call the name of the dead man, saying, "come and eat."

A woman is buried with her own people, even if she has children. In this connection they say *ebwe adefutq uzqimbia*, "a hawk does not miss the road where a man goes to make medicine." If a wife has run away, the husband pays a fine of twenty bags before the corpse can be buried.

The husband sits in a part of the house called *ani ono* and mourns. He has a fly whisk and a machet near him, and when his dead wife comes to kill him she sees the matchet and goes away.

In *Ubwodu* quarter, where a koko leaf may be used to cover the cooking pot, *ososo*, which is the same as *oweli*, is cooked by the women at the end of the

burial ceremonies and the pot is covered with a koko leaf; when steam comes out they say the dead man has gone. Bones, cloth, kola, palm nuts, corn, cowries, yams and meat are put in a broken calabash, passed round the pot and put on the edge of the street. If a man has been sent to the ajigifia three *omu ojuku* are used to call him back for burial, so that he may not hinder women from conceiving.

At Ezi, after the body is washed and shaved, the water pot is broken. The corpse is wrapped up, with cowries on its arms, and three goats sacrificed, one for the right hand, one for the left, and one for (*ewu*) *abonuke*. The young men make a mud seat (*ukbo*) and headwomen (*ada*) of the *idumu* kindle a fire underneath. The body is marked with spots of chalk all over it and a goat is killed on the coffin. In former days the leg used to be boiled, put in a bag, and carried by the slave victim, who ate the remainder of the goat and put anything he could not finish in the bag. When they come to make second burial, four goats are sacrificed, one rope (*ntoto*) of various yams is tied on the *ebwo* and the *osisi afolo*, that is the one without iron, is cut in two; one on the *ifejigko*, which is also cut in two, and two by the *onotu* of the various quarters. A ram is killed before the *akbo*, which is here called the *ekwensu*. The headman (*okpalebo*) must kill it with one blow. The blood is poured upon the *ikenga*, which is split and left. A cow is sacrificed and before it are placed a mat and two bags; one is said to be for *ien qifia*. A bag of plantain bark is made and the seed of *ubili* put into it with seven arrows. The *okpala* who owned the dead man puts it on his shoulder and leads the dog fourteen times widdershins round the mat; the *okpala* each time aims the arrow. The dog's throat is cut at one blow and the plantain bag and bow and arrow cut in two with a matchet. The other dog is also killed and the blood run on the mat; the first dog goes to the *onotu* and the second to the children. The widows bury *uruči* in the street and kill a goat on it. Then they take *qsiosiq* from their necks and bury it. The cloth they use in the bush house is put on the top, *okwa* is broken on the top, and burnt by the headwoman (*ada*). This is done at midnight and no man may see them. They wash there and shave. Each ties a new cloth and goes to her quarter and stays there till her hair grows. Then she goes to her new husband, who takes palm wine to her *okpala*.

A woman may be buried in her husband's quarter, unless she has left him; fourteen days afterwards a calabash is covered in the yard for *isebe aka ono*; the men bring yams and the women castor-oil seed and salt; kernels are put round the calabash and both are burnt. A daughter gives a fowl to the dead woman's son and he offers to *ofo* on the grave. Then the daughter takes *ofo* home. On the first day of burial the water pots and cooking pots are broken on the cooking place and her loom and other implements spoilt.

Children with teeth are buried inside the house so that they may come to the world again.

At Nsukwa chalk is put on the hands and over the eyes, and eagle's feathers

in the coffin. Cloth is lifted four times before it is put on the body and they say oñwuru (he is dead). Food is brought for the victim and what is left is put on the grave, which is made in the house. All pots and plates are broken; four yams are put down, two on each side of the corpse, and cut in half. The family of the dead man remains five days in the house, but the quarter can work as usual. The children shave their heads but keep a lock of hair at the back; this also applies to the married daughters. The widow is taken to another man's house, not a bachelor's house, and remains there seven weeks or more; she may not leave the house. Then she buys kola and washes and gets a small pot covered; she is led to the farm road and laments on the road; her head is shaved by ogba. Then she is taken to her children's house and stops there till she gets another husband.

The customs with regard to the ajqifia are much the same as elsewhere, but a woman who dies in pregnancy is also sent there, and the body of a suicide is burnt. If a man troubles his family after his death, they do not dig up the body, but offer a sacrifice of yams and koko yams on a leaf and take them away.

The Ibo tribes cover a large area, and the foregoing systematic notes relate to, at most, one-fourth of the total population. Stray notes were collected at other points in the Ibo area on a tour from Onitsha southwards at Owerri, Ahoada, Aba, and Aro Cuku.

At Owerri, where they speak a dialect that differs a good deal from those of other areas, there is no lamentation for very old men; yams are laid on the threshold, and are cut by old men of the town, who also kill a goat and drop its blood on the threshold, so that "when he comes to the world again he can set yams and bear children, and get a good face to earn money." The grave is dug a few yards behind the house by his brothers (?), and the people of his mbam (probably a clan reckoning descent originally in the female line) are summoned.

For a woman with children they buy a she-goat that has had kids, so that she may bear children when she comes again. The grave is dug near the wall.

At Ahoada the Ekpasia people, who speak a very aberrant Ibo dialect, bury a chief in a coffin; probably the same custom prevails some distance north, as I met a coffin on the road some miles from Owerri and at least forty miles from Ahoada. The grave is 7-8 feet deep, in a sleeping room; goats are brought, and people pass them round the corpse, repeating: "When you come to this world again, you must be prosperous, get money, children, etc." The goats are killed outside, after a hole has been dug for the blood. Mats are put in the grave; a white cock that has crowed is tied to the right hand of the corpse; if he was a farmer, a big yam is also put in. His mother's people come to help to bury him; they receive 140 manilas and a goat.

Both sons and unmarried daughters shave the whole head; married daughters leave a patch on the top. The wives shave completely, and put on their necks rags torn from their husbands' cloth; the head wife pays 60 manilas to her husband's people, the second 40 manilas, the third 30 manilas, and so on. They sit with the corpse till it is buried, and then remain six days in their own houses.

After this they stop lamenting and wash. At the end of a year the family is called together, and all wives have to shave again, even including an as yet unmarried girl for whom bride price had been paid and who had gone to the first-born son of the dead man after his death. Then all the wives are shared out; the children, big and small, also divide the yams.

There is no second burial; the grave is rubbed every four days.

At Omoku, north of Ahoada, a man is washed before he is dead, and then rubbed with camwood; a goat is killed "on his chest," and fowl's blood dropped on his eyes, so that "they may be sober." The body is wrapped in twenty cloths and the grave is dug in the house for a rich man. A goat is sacrificed on the farm road for the dead man's ajoko, a tutelar who looks after the yams, and one for Osaka (beneath a tree or post used for sacrificing to Ćuku).

Four days after burial a goat is killed for the sons and daughters to give food to the dead man; and a fowl is also divided among the people present, so that he may take the food quietly and do no harm to anyone while he is among the mwo.

Four days later all the sons share their heads and the daughters resident in the town do the same, leaving only a "cap."

The widow remains one month in her husband's house, doing no work, and then goes to her own house. She may remarry in three or four months. The old men sacrifice a goat to ndenwulanwu, the "first men that died," that they may prevent the dead man from killing her. All eat, including the widow.

When a man's wife dies, he and his children lament, and she is buried in the bush by her brothers. Four days after her death her husband puts on an old cloth; old widows take him to the waterside and wash him; the cloth is thrown in the bush and he shaves his head. His children shave also, and in the evening old women cook and put a yam in each child's hand, saying, "If your mother calls you don't answer, she is dead"; then she knocks the yams from their hands. A fowl is killed on the husband's legs.

At Itu, near Aba, lamentation lasts only one day; a dog's head is cut off and the blood put on the dead man's eyes "to make them as strong as a dog's"; then a yellow substance (*t* ochre) is put on his eyes and his wife kills a hen on his right hand. Both men and women are buried in the house; small children are rolled in a mat and thrown in the bush.

At Aro Ćuku women wash the body and comb the hair; the grave is dug in the house both for men and women. A goat is sacrificed in front of the house, but no blood is put on the grave. Qfg is taken to represent the dead man and kept in front of the house; it is not carved, but cowries are put on it. A woman's ēi is buried with her, and all her children get new ēi with which to worship the mother; these are made of mud inside the house near the cooking hearth in the front room.

A man's body is taken to the head wife's house before burial (in his own house) and the widow sits close to the corpse. She laments for three years (?) at

5.0 a.m. and 9.0 p.m.; she may not go to the farm nor to waterside and wears only black cloth. At the end of three years she swears that she has not committed adultery, and is allowed a "friend," but must remain in her late husband's house; she shaves her head and is allowed to go to market.

A young man is buried in his mother's house; all the property of a sterile woman is broken and buried.

The chief problem raised by the above account of Ibo burial customs is the meaning of the custom of second burial, which is shared by their western neighbours, the Edo-speaking peoples, whose customs I propose to deal with in another paper.

Three possible explanations suggest themselves:—

- (1) That "second burial" is a survival of an actual second funeral, in which the bones were taken up and deposited in an ossuary;
- (2) that it is designed to dismiss the dead man, conceived as hanging round the abodes of the survivors, to his own place; this is, of course, a possible origin of the second funeral also;
- (3) that it is connected with a custom of embalming or mummification, which is widely practised further to the west. If we suppose that the fundamental idea of mummification appealed to the peoples who practise second burial, but that their technical methods and the climate prevented them from desiccating the bodies, as do, for example, the Baule; still more, if we assume that circumstances originally permitted them to practise mummification, and that the central feature was perforce dropped, while an empty rite of burial of a non-existent body remained, we have an adequate explanation of the facts.

It has been pointed out above (p. 163) that the Ibo are probably immigrants from the north; if this is so, it is certain that they came from an area where the rainfall is vastly less than in their present habitat; and if, as we may suppose, the rite of mummification is, if not derived from, at any rate an integral part of, a culture which reached its highest development in ancient Egypt, the southerly migration of the Ibo presupposes a former habitat in greater geographical proximity to the culture in question.

As an alternative view we may regard second burial as a survival of a custom more widely practised in the East Indies; and even if no clear case of the original custom can be traced in West Africa, we must still, in view of theories of Indonesian affinities in West African culture, bear in mind the possibility that only the survival and never the original custom has been practised in this area. The custom in question is that of provisional burial until the bones are free of flesh and dry, followed by a formal burial, often postponed for years.

We find certain skull customs in the Ibo area, such as the carrying of the enemy's skull round the town and hanging of it in the hut in the Awka district;

and in the south of Aba there are large skull heaps, the origin of which I did not ascertain, as I heard of them only after leaving the district.

In both these cases we have a possible link with Indonesian customs. It should not be overlooked that at the present day in Indonesia the original custom is found in all stages of degradation, so that among Mohammedan Alfurs, for example, second burial has entirely disappeared. We have obviously no ground for arguing that because at the outset the exposure of the body was the primary custom and the putting away of the bones a secondary product, therefore in a new environment, where fundamental changes would be brought about by differences in physical condition, as well as by the vicissitudes of migration, the secondary feature may not have maintained its existence in a modified form, while the original element disappeared completely and was replaced by simple burial.

If burial customs and other elements of culture reached West Africa, by whatever route, from Indonesia, nothing is more probable than that far-reaching changes would have been introduced; in fact, the mere fact of migration would make the original burial custom—exposure and final burial of the desiccated bones—nearly an impossibility; and if one of the elements survived, it would be the second one, carried out by substituting other objects for the human remains that figured in the original rite.

There is, however, another possibility. The essential principle of the Indonesian rites is that the dead man is separated, not in a moment, as we conceive the dissolution of soul and body, but gradually, from the human society to which he belonged. After a time, and the duration of the intermediate stage depends on the state of the corpse in large measure, the dead man is again admitted to human society, but this time not on earth, but among the ancestors in the other world.

Now, it is quite possible for this conception of the gradual separation from living human society to exist without the further idea that the dead have to be admitted to the society of the other world. Where the conception of ancestor worship is predominant, even in Indonesia, a cult of reliques springs up and the skull may be preserved in the house and the rites are fundamentally altered.

Bearing in mind both the prominence of the cult of ancestors and the importance of ancestral images, and the doctrine of reincarnation found in most tribes, we must reckon with the possibility that the rite of second burial is not designed to despatch the dead man to the land of souls, but rather to recall him, after the dissolution of the body, to the neighbourhood of the family, either for purposes of ritual relations and worship, or to favour reincarnation in a child of the family. In this latter connection we may note that burial away from the family is held by the Ibo to sever the bond between dead and living and to prevent the dead man from being reincarnated; an analogous belief manifests itself in the rule, found sporadically in patrilineal tribes and habitually in matrilineal areas, which enjoins the husband to hand over his dead wife, sometimes even his children, to her

relatives for burial, clearly because by depositing her body in the neighbourhood of her relatives, her reincarnation in the same family will be facilitated. Reincarnation theories seem to have caused a certain amount of disintegration in the Ibo creed, and belief that in a future life the soul will associate with those with whose remains the corpse is placed, though important in Indonesia, can hardly be said to play any part in Ibo belief at the present time, whatever may have been the case in the past. In many other parts of West Africa the soul is regarded as bipartite; Delafosse distinguishes *niam* from *dia* in the Mandingo belief by translating the former word "dynamic soul" and the latter "breath of life," and regards the former as existing in a semi-spiritual state somewhere and enjoying superhuman powers of action and perception, while the latter is reincarnated. The former is annoyed by and suffers from the neglect or malperformance of funeral rites, and is the source of disease and suffering for survivors; the latter has no independent existence, as it seems.

Among the Ibo, however, the theory of the soul seems to take a different form. The surviving portion of a dead man is the *mwo*, which may be worshipped, and is, especially in the case of those who have met a violent death, the cause of sickness and trouble to survivors.

I have, however, at no time heard of any conception corresponding to his *dia*, and I am disposed to think that the Ibo belief is that the *mwo* is reincarnated.

Side by side with the *mwo* (and interchangeable with it in the Edo belief) is the *eri* or genius, sometimes duplicated as a result of Manichæistic theories which have also left their mark on belief about Osa, the supreme (sky) God.

While the position of the *eri* or double after death is vague among the Ibo, their belief in the reincarnation of the *mwo* seems clear. It is specially asserted of the *ajomwo*, or evil spirit, that he is not reincarnated; it is said of a child which dies soon after birth that it has recognized the world in which it was unhappy in a former life and refused to return to it; it is said that the newly-born are sent into the world by a being who stands to them in the relation of Āi, while they are known as *ago*; and a child is recognized as the reincarnation of an individual ancestor or as an incarnation of an *alose*.

Now, all these beliefs involve the supposition that the reincarnated portion of the dead man comes to the world of the living from outside, which does not seem to be the case with the Mandingo *dia*; and most of the beliefs imply knowledge and memory, which again are not associated with the breath of life. On the whole, therefore, it appears that the idea of a future life is vague among the Ibo and has, apart from the cult of ancestors, influenced but little the ritual of burial. At the same time, the fact that ancestors are addressed at all suggests that at one time some portion of the dead man was believed to survive apart from whatever was supposed to be reincarnated.

However this may be, we must not lose sight of the possibility that second burial is a bringing back of the soul of the dead man for cult purposes or for

reincarnation. And in this connection we have the indisputable fact that the name of the dead is called in the ajoifia before the celebration of the final rites.

True, the ajoifia is usually regarded as the place of deposit of the "bad dead," who have died of small pox or in some other way perished miserably. There is no evidence other than the rite just cited for the view that the soul of the dead man dwells in the ajoifia until the final rites are performed.

It is, however, possible that the ajoifia was originally a common burial ground, such as is used at the present day in parts of the Edo area. In any case, the ajoifia, being specially devoted to the dead, would come to be regarded as the appropriate place for a rite of recalling the soul.

If, therefore, the soul was recalled to the house, it seems clear that, in the absence of any subsequent rite of dismissal, it would be regarded as frequenting the neighbourhood of the village, even if it were not tied to the ancestral images.

This view does not, however, necessarily mean that the theory of Indonesian influence falls to the ground. Quite apart from the fact that the intermediate period between the disposal of the corpse and the final rites, to which corresponds for the soul of the dead man an equivalent period of waiting, is a clearly marked Indonesian conception, though of course by no means confined to Indonesia, the secondary Indonesian practice is, as has been pointed out above, to magnify the cult of relics, and especially the skull cult, and a natural, though not a necessary, result of this, especially in association with a doctrine of reincarnation, would be to cause the beliefs as to a future life to fall into the background and eventually, perhaps, to cause their complete atrophy.

Even if, therefore, the true interpretation of the Ibo customs is that the dead man is separated from the survivors only for a time, perhaps originally until the dissolution of the body was complete, there is no deep contradiction between this view and the Indonesian belief; it is quite possible to trace the steps by which the African belief would grow up, and Afro-Indonesian affinities still remain as a probable, or at least possible, theory.

On the whole, therefore—though, so far as our evidence as to second burial goes, the existence of numerous traces of embalming suggests that second burial represents the disposal of the real corpse, which came to be represented by a substitute when local conditions put embalming out of the question—the affinities of the rite and general probability rather point to an Indonesian origin for the practice of second burial.



2.—LIFTED OVER WALL.



4.—LOWERED INTO GRAVE.



1.—BODY ON BIER.

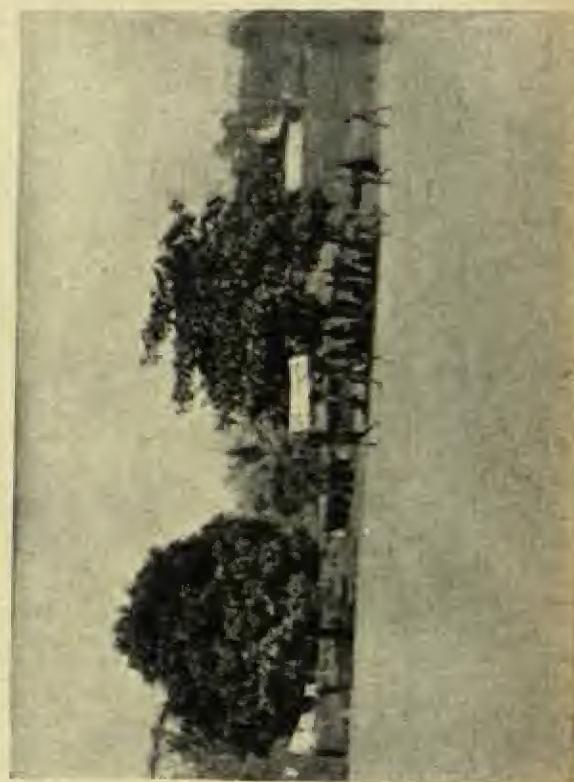


3.—AT GRAVE.





2.—WASHING HANDS.



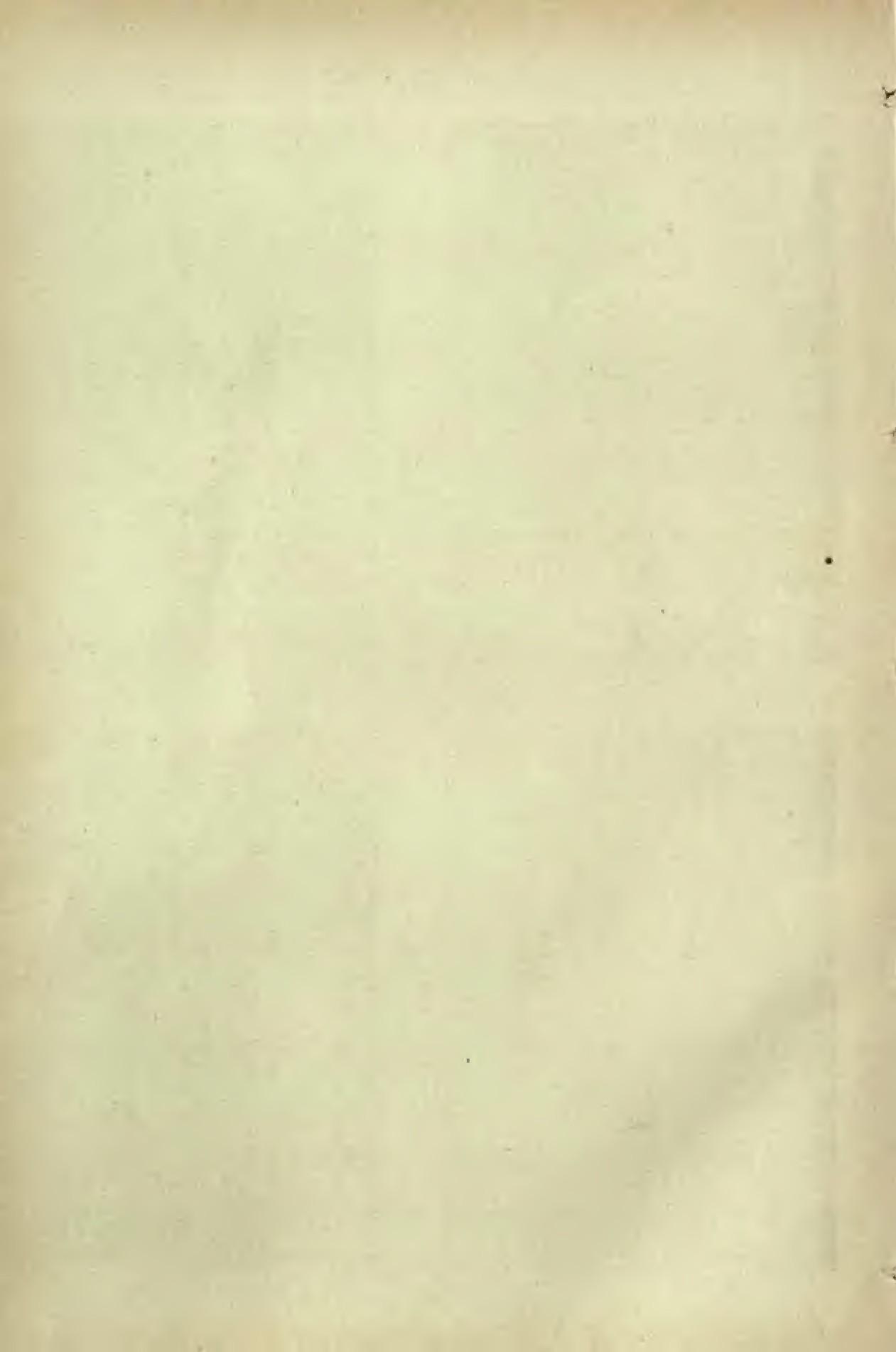
4.—CARRYING BODY FROM HOUSE.

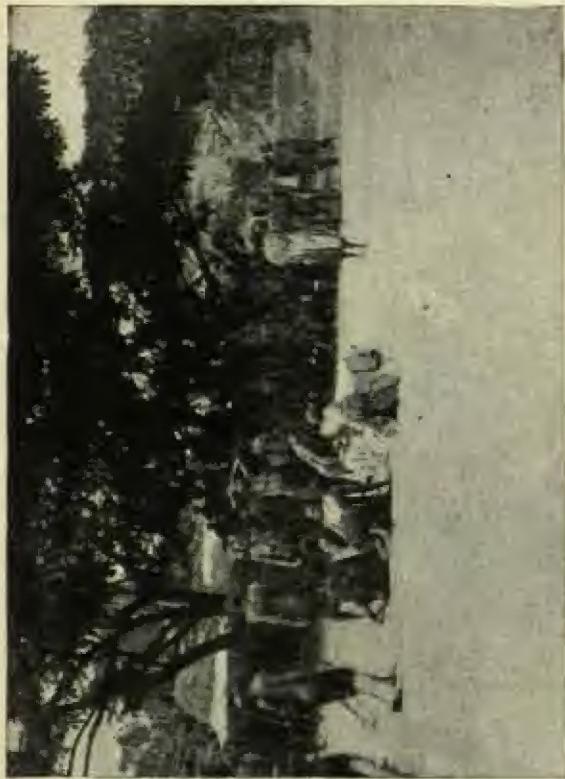


3.—WOMEN GOING TO SOURCE.



SOME THO BURIAL CUSTOMS.

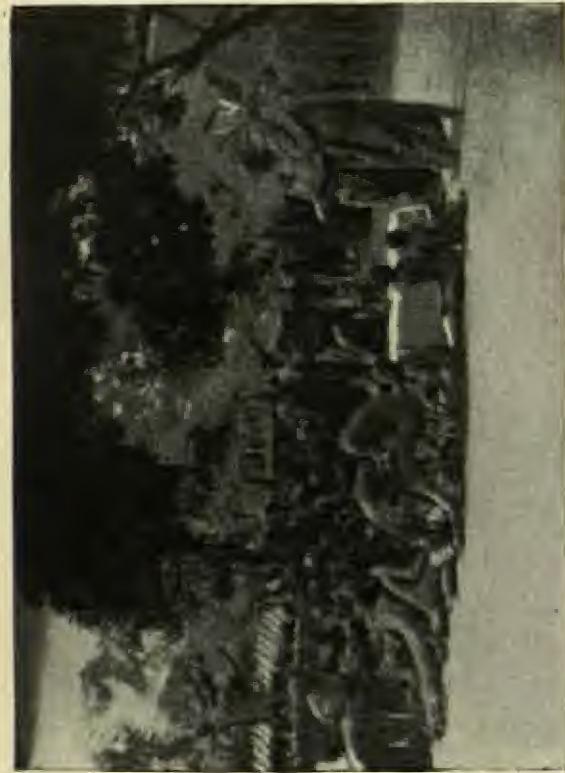




2.—GIRLS WAILING, MEN IN BACKGROUND.



4.—WASHING HANDS BEFORE OFFERING FOOD.



1.—GIRLS WAILING.

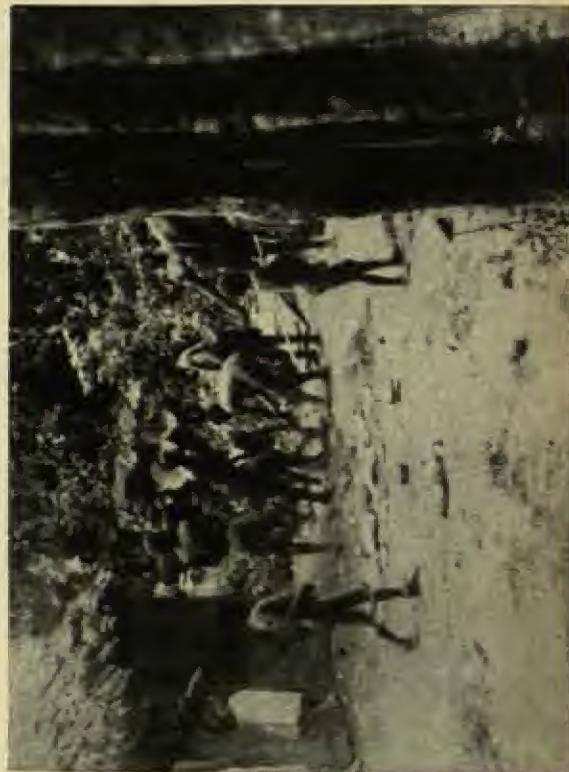


3.—TEARING CLOTH.





1.—OFFERING KOLA TO HEAD.



2.—KILLING DOG.



3.—WOMAN LAMENTING.



4.—WASHING HANUS; BROKEN WATER POT IN FOREGROUND.



## DESCRIPTION OF PLATES.

## PLATE III.

- Fig. 1. Amobia, near Awka : body lying on bier.  
 Fig. 2. " " " carried over wall.  
 Fig. 3. " " " at grave-side.  
 Fig. 4. " " " lifted into grave.

## PLATE IV.

- Fig. 1. Amobia, near Awka : filling in grave.  
 Fig. 2. " " " washing hands.  
 Fig. 3. Ibwariam : women going to mourn.  
 Fig. 4. " " coffin carried from dead woman's house to market place.

## PLATE V.

- Figs. 1-2. Ibwariam : lamentation by women in the market place.  
 Fig. 3. Isele Asaba : tearing cloth for tying the body.  
 Fig. 4. " " washing hands before offering food to feet.

## PLATE VI.

- Fig. 1. Isele Asaba : offering kola to head.  
 Fig. 2. " " cutting dog's head off.  
 Fig. 3. " " woman lamenting.  
 Fig. 4. " " washing hands with leaves. Note broken water pot.

## THE PHYSICAL CHARACTERS OF THE ARABS.

By C. G. SELIGMAN.

[WITH PLATES VII-XL]

IN attempting to discuss the physical anthropology of the Arabs, the initial difficulty must be faced, that the records upon which any conclusions must be based are few, scattered, and often incomplete. Probably there is no country in the world of equal area with Arabia, certainly there is none approaching it in historic interest, of whose inhabitants we are so profoundly ignorant. This applies not only to the natives of the Peninsula, but also to the Arabs of the Sudan, and to the Beduin of Western Asia and the Egyptian Desert. In fact, there is not a single family of the great Arab stock that has been adequately examined, and the present paper must be regarded as little more than a collection of available data, and an attempt to formulate an hypothesis which others may confirm or disprove by more extended observations.

The traditional Arab of the text-books is dolichocephalic and leptoprosopic, "with a fine oval face . . . . [a] type which . . . . often assumes an almost ideal beauty."<sup>1</sup> Yet a glance at the literature shows as many brachycephals as dolichocephals, or perhaps even more of the former. In discussing this difficult matter I shall begin with two skulls, both from Arabia, and both now in the Museum of the Royal College of Surgeons. Three views of these two skulls are given on Plates VII and VIII, and it needs but a glance to appreciate how dissimilar they are.

The first skull (R.C.S. 627) was brought back from Midian by Sir Richard Burton.<sup>2</sup> It is long, narrow (C.I. 71·1) and rather low (H.I. 68·4) with moderately marked impressions for the muscles, the occiput projects to a moderate degree, the lambda is occupied by a wormian bone. The face is not prognathous, the brow ridges are moderately developed. There is nothing negroid about the nose, which has a high and well-formed bridge. The orbits are long rather than high, and tend to be rectangular, the malar bones are prominent and probably gave a "square" appearance to the face during life.

The second skull, from the Barnard Davis collection (No. 558), is catalogued as that of Mossa Kadim, Arab of Oman. This skull is laterally asymmetrical, round (C.I. 88·2) and high (H.I. 85·09), with the occipital region steep and flat. The muscular impressions are well marked, the face is long; the brow ridges are slight; although there are no obviously negroid traits there is a fairly marked prognathism. The bridge of the nose is high and narrow, the nasal bones delicately formed. The

<sup>1</sup> Keane, *Ethnology*, p. 393.

<sup>2</sup> This is the skull described by Bosk, cf. Notes on a Skull termed "Nabathaean" (*Journ. Anthropol. Inst.*, viii, 1879, p. 321).

orbita large and round, with the external angles depressed. The jaw is well developed, the muscular impressions at the angles being marked. The ascending ramus is broad and short, the coronoid notch wide and shallow.

The chief measurements and indices of these two skulls are as follows:—

No.	H.L.	H.B.	Ht.	F.L.	U.F.L.	Bizy.	N.L.	N.B.	Ow.	Oh.	B.N.	B.A.
627 Midian ...	190	135	130	—	170	117	47	23	36	31	103	105
558 Oman ...	161	142	137	119	71	127	57	24	37	35	113	100

No.	C.I.	H.I.	F.I.	U.F.I.	N.I.	O.I.	Alv. I.	Cap.
627 Midian ...	71·1	68·4	—	59·8	50	86·8	101·9	1330
558 Oman ...	88·2	85·09	93·7	55·9	42·1	94·59	97·3	1300

The first question to be settled is whether these two skulls are typical of two great groups of the inhabitants of Arabia, or whether one of them represents the vast majority of the inhabitants of the Peninsula, the other being the remains of a chance wanderer or of a member of some isolated colony of foreigners.

First, with reference to the dolichocephalic skull from Midian. This specimen does not stand alone, for two other skulls from the same district (R.C.S. 626 and 628), also collected by Burton, resemble it, as do also two skulls brought back by the Sinai Survey Expedition (R.C.S. 624 and 625), while of five other adult skulls from the Sinai Peninsula, now in the Anthropological Museum at Florence, three are dolichocephalic and two are brachycephalic.<sup>1</sup> I shall return later to the significance of the two brachycephalic skulls, meanwhile noting that the majority (five out of seven) of skulls from Sinai are dolichocephalic. The suggestion that the population of the Sinai Peninsula is predominantly long-headed is borne out by the measurements of eighteen living subjects given by Chantre,<sup>2</sup> who measured a number of Tuarah Beduin of Sinai, camelmen from the neighbourhood of Tor on the Sinai coast. They are rather short dolichocephals with an average C.I. of 73·3 and not one of them is brachycephalic (min. 68, max. 77). Unfortunately Chantre does not give the absolute measurements, but only the chief indices and averages of his length and breadth measurements. These are as follows for eighteen males:—

	H.L.	H.B.	N.L.	N.B.	C.I.	N.I.
Tuarah of Sinai (18) ...	191	140	45	34	73·3	75·5

<sup>1</sup> Ugo Giovannozzi, "Crani Arabi del Museo Antropologico di Firenze," *Archiv. per l'Antrop. e la Etnol.* (Firenze), 1904.

<sup>2</sup> *Recherches Anthropologiques en Egypte* (Lyon, 1904), p. 206.

Passing further north, we have records of a certain number of skulls from Palmyra, the modern Tadmor in Southern Syria, on the northern border of the Arabian desert. One of these, a female skull brought to this country by Burton, is now in the College of Surgeons collection (No. 622). It is dolichocephalic (C.I. 74·1), while the fragments of another calvaria (R.C.S. No. 621) collected at the same time "indicates a long narrow cranium."<sup>1</sup>

Three other Palmyra skulls brought back by Mr. Cotesworth have been described by Busk,<sup>2</sup> while another small series of three, collected by Burton and briefly described by Blake,<sup>3</sup> are now in the Museum of the College of Surgeons (Nos. 623<sup>1</sup>, 623<sup>2</sup>, 623<sup>3</sup>). Of these six skulls four are dolichocephalic, and two are mesaticephalic, or, grouping together all the adult Palmyrene skulls collected by Burton and Cotesworth, it may be said, that while 75 per cent. are dolichocephalic, none are brachycephalic.

With the possible exception of one specimen (No. 622 in the Royal College of Surgeons Museum) these Palmyrene skulls are all regarded by their discoverers as of considerable age. Cotesworth obtained his skulls from a group of towers of late classical age, and was prepared to "guarantee they have never seen the light since first put away 1800 or 2000 years ago." Moreover, Busk frankly speaks of these as well as two of Burton's specimens as "Mummy skulls," so that there seems no reason to deny that these skulls belonged to the early centuries of our era.

Two skulls collected some twenty miles south of Beersheba, briefly described by Virchow,<sup>4</sup> are dolichocephalic with cephalic indices of 72·6 and 72·7. They are apparently of considerable but uncertain age. Further north to the east of Jordan the Beduin are still dolichocephalic. Craniographic drawings of half-a-dozen skulls described as those of members of the Beni Adwan and Beni Sakher tribes indicate that five of these are dolichocephalic. The remaining skull, of the same general character, is probably mesaticephalic or possibly even brachycephalic.<sup>5</sup>

Six skulls from Yabrud in the extreme north of Palestine, now in the College of Surgeons and the Cambridge Museum, give an average C.I. of 74·8. Some of the chief measurements of these skulls are given on page 236. It will be seen that all except one are dolichocephalic. The one exception though brachycephalic is not hypsicephalic, and presents no occipital flattening, the two obvious features of the round Armenoid skulls of Mesopotamia. Thus its increased transverse diameter is probably to be regarded as an individual variation comparable to that of the

<sup>1</sup> Thus Sir Richard Owen in a note entitled "Observations on the Collection of Skulls sent by Captain Burton, F.R.G.S., etc., to the British Museum, September, 1878" (*Journ. Anthropol. Inst.*, viii, 1879, p. 323).

<sup>2</sup> Notes on some Skulls from Palmyra, presented to the Institute by the late Mr. Cotesworth (*Journ. Anthropol. Inst.*, iv, p. 366).

<sup>3</sup> Notes on Human Remains from Palmyra (*Journ. Anthropol. Inst.*, i, p. 312).

<sup>4</sup> *Zeit. f. Ethnol.*, xxiii, 1891, p. 578.

<sup>5</sup> Paul Langerhans, "Ueber die heutigen Bewohner des heiligen Landes" (*Archiv. f. Anthropol.*, vi, 1873). It is not clear that the measurements given are those in common use at the present day; they give an average C.I. of 75·5, but perhaps this is too high.

Kababish bard (*infra*, p. 227), and this skull might be described as morphologically dolichocephalic.

From the comparison of these skulls it is clear that the dolichocephalic skull from Midian not only represents a well-defined Arab type widely spread in Arabia and Palestine, but that this type is no new thing in Arabia, since men with skulls resembling the modern inhabitants of Midian and Sinai lived on the northern edge of the Arabian desert some 1800 years ago.

Turning to the Oman skull, it is obvious that this is quite different from the long, rather narrow skulls of the Arabs of Midian and Sinai, while its measurements in no way resemble those taken on the living Beduin of Sinai by Chantre. Although no other skulls from the south are available for comparison, the measurements of living Arabs from Southern Arabia, published by Mochi and others, indicate that brachycephals constitute more than half the population, so that the subject from whom this skull was derived was no chance wanderer, unless indeed later work should show that the Oman skull differs from the general type of the South Arabian population in characters having definite racial significance.<sup>1</sup> The average of the measurements of sixteen males from the Yemen examined by Dr. Livi (the majority apparently from the coastal district) gives a C.I. of 83·18 (min. 74·4, max. 88·4) with 75 per cent. of brachycephals.<sup>2</sup> Of these sixteen men all except four have a C.I. over 82, i.e., if their skulls had been measured directly their C.I. would have been over 80.

Another series of twenty Yemenites measured by Dr. Leys<sup>3</sup> gives a C.I. of 81·07 (min. 73·16, max. 88·51) with 60 per cent. of brachycephals. Reference should also be made to a group of twenty Yemenites cited by Bertholon and Chantre<sup>4</sup> with a C.I. of 82·56.

<sup>1</sup> The Oman skull is of the Armenoid type, and this type is represented on Sabaeon coins some 2000 years old (*infra*, p. 223 and Plate XI). Moreover, photographs show that some South Arabians have a typical Armenoid nose (*infra*, p. 223), so that there can be little doubt that at least a proportion of the natives of South Arabia are of the type represented by the Oman skull. Whether this is true of the bulk of the population cannot yet be stated; the short stature of the majority of the subjects who have been measured is somewhat against this view, and supposing the original inhabitants of South Arabia to have been round-headed, it is easy to see how Mesopotamian influence may have led to the coexistence of two brachycephalic types.

<sup>2</sup> Aldobrandino Mochi, "Sulla Antropologia degli Arabi" (*Archivio per l'Antropologia e la Etnologia*, vol. xxxvii, fasc. 3, 1907).

<sup>3</sup> N. M. Leys and T. A. Joyce, Note on a Series of Measurements from East Africa (*Journ. Anthropol. Inst.*, xliv, 1913).

<sup>4</sup> L. Bertholon and E. Chantre, *Recherches Anthropologiques dans la Berbérie Orientale* (Lyon, 1913), p. 349. It should, however, be noted that another group of thirty Yemenites from the mountains near Sana'a measured by Mr. Oliver Atkey, F.R.C.S., gives a lower cephalic index, viz., 77·47 (W. L. H. Duckworth, "Contributions to Sudanese Anthropometry," *Report Brit. Ass.*, 1912, p. 615). Reference may be made here to a series of twenty-five skulls "brought back" from Aden, now in the Lyons Museum and studied by Chantre (Bertholon and Chantre, *op. cit.*, p. 309). The average C.I. of nineteen male skulls is 75·55, that of six female skulls 73·18. It may be suggested that these are not the skulls of Arabs, but of Somali, of whom there is a considerable population at Aden. The average C.I. of twenty-seven Somali measured by Leys is 74·79, and the suggestion is strengthened by the comparison of these skulls

Further south the cephalic index is still high. Leys has measured 82 men of the Sheher Beduin, whom he describes as a relatively poor tribe living inland from Aden. Their average C.I. is 80·92 (min. 71·43, max. 91·23); 47, i.e., more than 50 per cent., having a C.I. of over 80.

Passing eastwards, the cephalic index though slightly lower is still high, for the series of 31 Maskat Arabs measured by Leys (*op. cit.*) gives an average cephalic index of 78·28 (min. 71·78, max. 92·22) and includes some 30 per cent. of indices over 80.

Examination of figures yielded by 149 South Arabians, of whom the individual measurements are available, shows :—

Dolichocephals	...	...	13	(8·5 per cent.)
Mesaticephals	...	...	56	(37·5 per cent.)
Brachycephals	...	...	78	(52·3 per cent.)

If the eastern (Maskat) group of 31 subjects be omitted the results are even more striking, the figures being as follows :—

Dolichocephals	...	...	7	(5·9 per cent.)
Mesaticephals	...	...	40	(34·8 per cent.)
Brachycephals	...	...	71	(60·1 per cent.)

Having shown that both long-headed and short-headed Arabs are found in Arabia, it will be profitable to consider the distribution of each of these types. With the exception of the measurements of Sinai Beduin already quoted, no measurements of living subjects appear to be recorded from Northern Arabia, while, as far as I have been able to ascertain, the only skulls from this portion of the Peninsula are those already mentioned. The great majority of these modern skulls are dolichocephalic, and since the majority of ancient skulls from Palmyra are also dolichocephalic, it seems legitimate to conclude that the northern Arabs are predominantly long-headed and have been so for the last 2000 years. There really can be little doubt as to this conclusion, which is confirmed by an examination of a series of skulls collected by the Palestine Exploration Fund at Safed, in Galilee, and dating from the Roman period. These skulls are predominantly dolichocephalic. In other words, the northern Semites were essentially long-headed, and the Arabs of Northern Arabia exhibited and still exhibit this characteristic.

A word must be said as to the meaning to be attached to "northern" and "southern" Arabia. The greater part of the interior of Arabia consists of immense lava tracts called *harrah*, and of high dune regions of wasted sandstone (*nafud* or *dahna*). North and south, these sand regions are of great width, extending almost

with those of the inhabitants of Northern Africa instituted by MM. Bertholon and Chantre, who point out that the North Africans to whom these skulls show affinities are those most frankly Berber tribes "whom no one has ever thought of calling Arab." In other words, these skulls are Hamitic, and so resemble those of the Berbers (Hamites) of North Africa.

across the Peninsula. The northern Nafud can be crossed only with great labour and difficulty, and, as pointed out by Hogarth, has, in fact, been crossed by not more than half a score of Europeans.<sup>1</sup> The southern sand desert, known as the Rub el Khali—the empty quarter—is a name of terror throughout Arabia, and has yet to be tried by a stranger. "These two fearful tracts are joined on the east by a desert belt narrowest on the north-east, where, owing to the intrusion of granites and basalts in Jebel Shammar, the supply of sand fails for a brief space, and the caravans may pass to Koweit and Basra over ill-watered but comparatively firm ground."<sup>2</sup>

Following this description and ignoring the Tehema, the western coastal plain, a glance at the map shows that the country falls naturally into three main divisions, a northern, a southern, and a third less well characterized central area between the Midian coast on the west and the head of the Persian Gulf on the east. The northern division extends to the edge of the Syrian desert, and, apart from its oases, is inhabited by nomad tribes. Desert throughout, yet parts furnish not inadequate pasturage at certain seasons. Stony in the north, in the south it is predominantly sandy and includes the Great Nafud.

The southern division contains the highlands of Yemen and Asir in the west, which, with the Hadramut, including the almost unknown Sheher district,<sup>3</sup> form a habitable zone round the great southern desert, continued to the east by Oman and Jebel Akhdar, north of which lies the practically unknown country behind the coastal area of the Persian Gulf. The Yemen and Asir highlands enjoy a temperate climate, due to their considerable elevation and their proximity to the sea. Their population consists largely of agriculturalists whose terraced hills form one of the most characteristic features of the landscape.

The central zone, less well characterized than the other two, may be considered to extend from the neighbourhood of Kheybar north of Medina to somewhat to the south of Mecca. It includes the Hejaz, Nejd, and El Hasa. For the most part it is a dry stony steppe, but sparsely occupied by nomad tribes; yet it contains the holy cities, and the great wadys which intersect it hold many fertile stretches of alluvial soil, where cultivation is possible, and which support a considerable settled population, large enough at Hail and El Riad to form small independent Emirates.

The data already given indicate that both the northern and southern divisions

<sup>1</sup> *The Penetration of Arabia*, p. 4.

<sup>2</sup> Hogarth, *loc. cit.*

<sup>3</sup> There seems little doubt that the Sheher measured by Dr. Leys (*supra*, p. 218) come from this district. Leys and Joyce describe the Sheher measured by the former as "Bedawi from well behind Aden, a nomad tribe who are too poor to obtain black slaves, and are therefore comparatively pure-blooded." Mr. Cyril Crossland, of the Sudan Civil Service, informs me that the Sheher country is east of and inland from Makalla, about five days journey afoot. They trade with Makalla and come down to the sea, some of them being fishermen, though engaged for the most part in agriculture. Like other Hadremi tribes, they build mud houses, which in towns like Makalla may be six storeys high, though only the lowest courses are of stone. The Sheher houses in the hills are small, but built on the same plan. The Sheher, like other Hadremi, are, in a limited way, migratory, parties going out and living in tents should the rainfall be deficient.

have their characteristic population; in the north dolichocephalic, in the south brachycephalic. No statement comparable with this can be made with regard to the central area. Culturally and historically this area is more closely related to the Beduin north than to the settled south, and there seems little reason to doubt that its ancient inhabitants were one with their northern neighbours. To what extent Islam and the events of the few centuries preceding its advent may have influenced the people, we can only guess, but we know that one result of the Abyssinian conquest of the Yemen was an influx of Jews into Mecca; and it may be guessed that the failure of irrigation in the south traditionally associated with the breaking of the dam at Ma'rib led to migrations northwards from the remains of the southern kingdoms.

For this central area the available material consists of a single female skull from Kheybar in the Hejaz, and a small number of measurements taken on the living, the latter of less value because taken at a seaport. The skull was collected by Huber and presented by him in 1882 to the Museum of the Jardin des Plantes; it is dolichocephalic with a C.I. of 72·8 and an H.L. of 71·7.

The living subjects are twelve men measured at Jeddah; only one has a C.I. of less than 75; six are mesaticephalic, while of the remaining five brachycephals four have an index above 82. The average C.I. of the series is 79·37 (min. 71·3; max. 86).<sup>1</sup>

The brachycephals of Southern Arabia are of low or medium stature, the seventeen Yemeni recorded by Mochi give an average of 1·63 m., those (20) measured by Leys about 1·65 m., which is also the average of 31 natives of Maskat, while the Sheher (82) have the lowest average stature, i.e., 1·62 m. The only measurements from the northern (dolichocephalic) area that I have been able to find are those given by Chantre for the Tuarah (*loc. cit.*): the average stature of 18 men was 1·66 m. Probably it would be unsafe to conclude that all or even the majority of the northern Arab tribes have as low an average stature as this, although the Maaza of the Eastern Desert between Suez and Keneh are short dolichocephals with an average C.I. of 75 and a stature of 1·66 m.<sup>2</sup>

It will be asked, how is it that Southern Arabia has a predominantly brachycephalic population? Probably it is yet too early to give a satisfactory answer, but at least the direction in which the answer must be sought can be indicated.

In the first place South Arabia as the great incense producing country has from the earliest known times played a definite part in the civilizations which grew up round the eastern Mediterranean coast lands. South Arabian inscriptions are known, dating at least from 800 B.C., and perhaps several centuries earlier. These inscriptions fall into two groups, the Minaean and Sabaean. To the first belong texts dating from the period of the kings of Ma'an whose capitals were in the South Arabian Jauf, in the neighbourhood of San'a and Ma'rib, as well as others from Qataban and the Hadramut. The Sabaean inscriptions begin in the period of the so-called priest-kings, some 700–500 B.C., and continue for about a thousand

<sup>1</sup> Mochi, *op. cit.*

<sup>2</sup> Chantre, *op. cit.*, p. 220.

years. I have not been able to discover that the texts of either class refer directly to the incense trade; but there seems no doubt that the Sabaeans inscriptions which begin 700–500 B.C., and which refer to an important kingdom with its capital at Ma'rib, are the inscriptions of the sovereigns whose wares reached Egypt and Syria, and whose caravans travelled at least as far as Northern Arabia. How definitely this kingdom was identified with the incense route is shown by references in the Old Testament in which Jeremiah<sup>1</sup> (*circa* 640 B.C.), Ezekiel<sup>2</sup> (*circa* 580 B.C.), and Isaiah<sup>3</sup> (? 500 B.C.) speak of South Arabia as the country whence came frankincense and gold.

The Minaean kings are supposed to have possessed a colony in the land of Midian (called Muṣrān in the inscriptions). Minaean inscriptions have been found at El 'Ola on the old incense route (now the pilgrim route), and it may be inferred from the passage in Isaiah already quoted that the Sabaeans were the heirs not only of the Minaean kingdom in South Arabia, but also of their colony in Midian. Here, in the neighbourhood of Medain Saleh and at Teyma to the north, there is direct evidence of Mesopotamian influence. The Teyma stone records the introduction of an Aramaean cult served by a priest having a name of Egyptian origin, while Euting discovered at Teyma part of a stone carving in Mesopotamian style which he attributed to the sixth century B.C.<sup>4</sup> Again, the extraordinary rock-hewn, lion-like (?) monsters, sketches of which are given by Doughty and by Euting, can only be due to Mesopotamian influence.

Moreover, there are Mesopotamian references to the Yemen; a certain Ithamar the Sabaean, who must be identical with one of the kings of that name mentioned in Sabaean inscriptions,<sup>5</sup> is referred to in a cuneiform text (Annals of Sargon, 715 B.C.). The geographical position of Southern Arabia between Africa, Syria, and further Asia (India) could scarcely fail to bring about connections with all these. I have already referred to Syria and Mesopotamia in the first millennium B.C.; with regard to the latter, the general tendency among Semitic scholars is to carry the relationship very much further back. Dr. Stanley Cook tells me that there are interrelations between the South Arabians and Mesopotamian cultures almost as far back as we can go, i.e., to the earliest Semitic dynasty.<sup>6</sup>

A glance at the map shows that there are two routes by which Mesopotamian influence might have travelled; an indirect route through Syria and Palestine, and

<sup>1</sup> vi, 20 : "To what purpose cometh there to me frankincense from Sheba and the sweet cane from a far country?"

<sup>2</sup> xxvii, 22 : "The traffickers of Sheba and Raamah they were thy traffickers; they traded for thy wares with the chief of all spices and with all precious stones and gold."

<sup>3</sup> ix, 6 : "The multitude of camels shall cover thee, the dromedaries of Midian and Ephah; they all shall come from Sheba: they shall bring gold and frankincense. . . ."

<sup>4</sup> *Tagbuch einer Reise in Inner-Arabien*, ii, 155 (Leiden, 1914).

<sup>5</sup> *Ency. Brit.*, Art Inscriptions, p. 620.

<sup>6</sup> Concerning possible points of contact in the third millennium B.C., see *Ency. of Islam*, art. Arabia, p. 377. I am not now concerned with connections with India, but may point out that the Brahmi, the most ancient script of India, is generally agreed to have been derived from Semitic, and if this be so, its parent can scarcely have been other than a South Arabian script. Kharosthi, too, has a Semitic origin.

a direct route across Arabia by Jebel Shammar between the Great and Little Nafud. Recent journeys show that this route is still practicable; moreover, there is reason to believe that the whole north African desert zone, of which the Arabian desert is a continuation, is drier now than it was between two and three thousand years ago.<sup>1</sup> An alternative suggestion is that this foreign influence reached the trade route from the south, i.e., that by the first millennium B.C. there was a strong Mesopotamian influence in South Arabia, which spread north along the incense route. A glance at the map will show that not only was there no efficient geographical obstacle to the early spread of Mesopotamian influence into Southern Arabia, but that it must almost certainly have occurred. In mediæval times there are two outstanding examples. About A.D. 570 the Yemen was conquered by the Persians under Khosroes I., who installed a governor whose successors continued to rule the country until Badhan, the last governor, accepted Islam a few years after the death of Khosroes II. Parwez in 628.

The other example, which shows that it was easy for a considerable body of men to pass from Arabia to Mesopotamia, is offered by the march of Khalid ibn Walid. At this time the frontier of the Persian Empire was in the neighbourhood of the modern Koweit, and near here the Persians were defeated in the "Battle of the Chains." Khalid was not again opposed until he reached the neighbourhood of the Tigris canal, where he gained a new victory, whence, pushing on, he fought his next battle at Walaja, near the junction of the Tigris and Euphrates. After this, Khalid worked up the Euphrates and, having captured Hira, fought a battle near the site of Babylon.

With regard to actual knowledge of Mesopotamian influence at an early date, the evidence for the most part is inferential rather than direct. Yet, within the last few months, Mr. G. F. Hill, Keeper of the Numismatic Department of the British Museum, has drawn attention to a sign found on those South Arabian coins referred to below (p. 223), which imitate the older Attic types. There seems to be every reason to believe that this sign is derived from the Babylonian twin-dragon sceptre, or rather twin-serpent sceptre motif. The earliest example of it is found on a steatite vase in the Louvre, dedicated by Gudea, *patesi* of Lagash, to his patron deity, and so dating from about 2450 B.C. Moreover, the fact that long before the sixth century South Arabia was a country of a thriving civilization with an agriculture so advanced that irrigation works on a considerable scale existed and were kept in repair for hundreds of years, itself suggests Mesopotamian influence. It does not at present seem possible to do more than state the problem of these "Mesopotamian" monuments in some such terms as these; in any case it must be

<sup>1</sup> Apart from any question of the validity of Professor Huntingdon's conclusions as to the desiccation of Central Asia, Mr. Douglas Carrothers, in his recent journey in Northern Arabia, found a tradition of a great drought, lasting seven years, about the time of Mohammed, and saw the remains of a large khan far out in the desert on a supposed ancient trade route between Egypt and Basra ("A Journey in North-Western Arabia," *Geographical Journal*, xxxv, 1910, pp. 235 and 243).

remembered that contact with Southern Arabia was at least frequent enough to score the rock faces at the hills in the northern portion of the incense route with inscriptions in South Arabian scripts.

Turning to the physical side, the predominant brachycephaly of South Arabia—so different from the condition found in Northern Arabia—immediately suggests a relationship with the neighbouring great brachycephalic area of Western Asia—i.e., Asia Minor and Mesopotamia. It is, of course, possible that the inhabitants of Southern Arabia were originally akin, not to the northern inhabitants of the Peninsula, but to some race of the round-headed *Homo Alpinus*, such as the Tajik. But, even though this be admitted, it will be profitable to see whether there is physical evidence, other than the marked brachycephaly, suggesting Mesopotamian influence. The Armenoid (so-called "Jewish" or "Semitic") nose is probably the most definite facial character of the round-headed populations of Asia Minor and Mesopotamia, and if this feature is present in any considerable number of the population of Southern Arabia, then it seems certain that there has been a considerable infusion of "West Asiatic" blood. Photographs of South Arabians are rare; those of sufficient size to show the character of the features are still rarer, but among the illustrations in one of the recent books by Mr. Wyman Bury on the hill country round Aden is one showing a typical Armenoid nose,<sup>1</sup> while of two Maskat Arabs of aristocratic lineage and said to be "pure-bred," of whom photographs are published in this paper, one has a pronouncedly Armenoid nose.

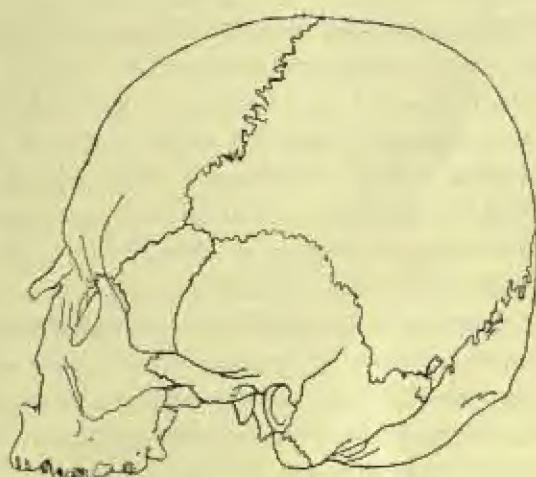
So much for the facial character of modern South Arabians. Mr. Hill<sup>2</sup> has recently published reproductions of a number of early South Arabian coins in the British Museum which show that in the centuries immediately preceding the present era South Arabia, or part of it, was ruled by a series of kings having characteristic high and rounded heads with Armenoid noses.

Mr. Hill points out that the coins in question, which belong to the Sabaean period, are imitations of the earlier Attic coinage, bearing on the obverse the head of Athena. In the older examples reproduced in Mr. Hill's paper the head is still low and tolerably long, as in the Grecian coins (Plate I, Fig. 2). In a coin of later style (I, 3) the proportions of the head have changed: it is shorter and higher, and the nose, no longer Grecian, is aquiline or Armenoid (reproduced here as Fig. 3 of Plate XI). Later still, *circa* 70–40 B.C., the head, no longer that of Athena, is frankly "Arab" (I, 8, reproduced here as Plate XI, Fig. 4). The skull is high and round, flattened behind with a long face and big projecting nose. In fact, the shape of the head and character of the face is remarkably like that of the Oman skull, which, it will be remembered, has the flat occiput and hypsicephaly which is so characteristic of West Asiatic skulls. In this example the nose is not aquiline, though it tends in this direction in another specimen (I, 7). But although the influence of Athens is predominant as regards morphology, the standard (weight)

<sup>1</sup> *The Land of Uz.* Plate facing p. 29; cf. also plate facing p. 296, which probably represents the same man.

<sup>2</sup> "The Ancient Coinage of Southern Arabia" (*Proceedings of the British Academy*, vol. vii).

is that of Persia—i.e., it seems that in the main trade relations were with the dominant empire of the East, not with the West, and this bears out the origin put forward by Mr. Hill for the remarkable symbol on some of these Arab coins.



KURD OF DIABEKR (CHANTRE).

All these suggestions of a genetic relationship between the inhabitants of South Arabia and the Armenoid peoples of Western Asia are supported by the undoubted resemblance of the Oman skull to those of the round-headed inhabitants of Asia Minor. The strength of this resemblance will be obvious to anyone who examines the figures of Western Asiatic skulls given by Chantre in *Mission Scientifique en Transcaucasie, Asie Mineure, et Syrie*. It is from this work (Plate XXXII) that the skull of a Kurd of Diabekr, reproduced here for comparison with the Oman skull, is copied.

Passing from Arabia, the Arabs of Africa may next be considered, but at the very outset the difficulty must be faced that the great mass of the Arabised natives of Algeria and Morocco, the so-called Arabs of almost every anthropologist from the time of Broca onwards, present little or no evidence of Arab blood, and are to be regarded not as Arabs, but as Arabised Berbers. Such at least is the conclusion of MM. Bertholon and Chantre,<sup>1</sup> and although, as I shall try to show later, an important reservation must be made, there seems little doubt that the majority of these so-called Arabs are no other than Berbers, who, adopting the Arab language and Arab ideas, have become more thoroughly Arabised than their Berber-speaking brethren. There is, of course, historical evidence that considerable groups of Arabs migrated towards western Mediterranean lands in the first few centuries after the

<sup>1</sup> "... dans l'Afrique du Nord, il n'y a plus d'Arabes vrais qu'à l'état sporadique.... La Berbérie est un pays arabisé moralement par l'importation d'un culte, qui se double d'une organisation spéciale théocratique ; mais ce n'est pas une région, répétons-le, comportant des populations de race arabe proprement dite" (*op. cit.*, p. 347).

Hegira,<sup>1</sup> but at the present day it seems that they have been absorbed into the general population, and that there is no generally valid method of distinguishing their descendants: a result which might have been expected seeing that the immigrants, if of the North Arabian type, would be long-headed and of medium stature, and so not easily distinguishable from the mass of the North African population.

Probably the conditions which prevail in Algeria and Morocco do not apply, at any rate with the same force, to parts of Tunisia, and there can, I think, be little doubt that Tripoli stands on a different footing. Apart from the littoral belt, the greater part of the country east of Tunis is desert or poor steppe, with an annual rainfall varying from three inches or less to ten inches, and only exceptionally attaining the latter figure. When in a sparsely inhabited area such as this are found groups of pastoral or semi-sedentary folk calling themselves Arabs, living the life of Arabs and claiming descent from Arab ancestors, there seems to be no sufficient reason to suppose that they are not predominantly of Arab blood. As far as our present knowledge goes, it would seem that the nomadic or semi-nomadic inhabitants west of the Nile Valley stretching to Tunis are predominantly Arab, but even here it must be observed that the oases—at least in part—constitute an exception. Thus the measurements and photographs of men of Kharga Oasis published by Hrdlička show that its inhabitants are, for all practical purposes, Egyptians, differing in no essentials from the inhabitants of the Nile Valley.<sup>2</sup>

In discussing the Arabs of Africa east of Tunis it will be convenient to begin with those of the Nile Valley. Chantre has measured a number of Egyptian Arabs—Beduins, as he calls them—the most important part of his material being derived from the following tribes:—<sup>3</sup>

- (i) The fisher folk of Lake Menzaleh, who are said to trace their origin to Sinai.
- (ii) The Harabi of the Fayum and the Tripolitan desert, still true pastoral nomads.
- (iii) The Aulad Ali of the Behera district of the Delta.<sup>4</sup>
- (iv) The practically sedentary Howeytat of Matarieh.

<sup>1</sup> The best-known example is offered by the immigration of the Beni Hilal. In 1048 the vizier of the Fatimid Khalif Mustansir launched a number of the nomadic tribes of Upper Egypt, including the Beni Hilal, against his master's orthodox vassals of the Northern African States. Each man was provided with a camel and given a gold piece, the only condition being that he should settle in the Maghreb. Within two years the Beni Hilal had pillaged Cyrenica and Tripoli and captured Kairwan, continuing their steady westward movement for another ten years or so.

<sup>2</sup> *The Natives of Kharga Oasis, Egypt* (Washington, 1912).

<sup>3</sup> *Recherches Anthropologiques en Egypte*, pp. 196 *sqq.*

<sup>4</sup> Although the Aulad Ali constitute the strongest nomadic tribe of the Tripolitan desert on the Egyptian marches, those of the Behera district are no longer nomads.

The average cephalic indices of these tribes vary from 72·82 to 75·39, the figures being as follows:—

- Harabi (29), 72·82.
- Howeytat (8), 74·21.
- Fisher folk of Menzaleh (25), 74·48.
- Aulad Ali (20), 75·39.

These indices agree closely with the result of measurements of the Kababish, the strongest and richest tribe of nomad camel Arabs in the Sudan. Their history has recently been studied by MacMichael, who points out that the Kababish are not a homogeneous people. This is true in the sense that the members of the tribe do not claim descent from a common ancestor, and that the divisions of the tribe have no long and steadfast tradition of unity. The very reverse of this is the case; indeed, not only have Arab groups of different though kindred origins come together to form the tribe, but the latter includes a definite, though smaller, number of elements of Beja origin. Thus the Kababish are a congeries of divisions of various Arab tribes with a minority of Hamitic origin, but in spite of this the several component elements of the tribe will probably be found to be less contaminated with non-Arab blood than those of any other Sudan-Arab tribe to which a single tribal name is now applied.<sup>1</sup>

Their early history—i.e., their connection with Arabia—is by no means clear, in spite of the common belief that the Beni Okba were the founders of the tribe, and the fact that Makrizi records that a portion of this tribe had migrated to Egypt, and also gives their Syrian territory, which agrees substantially with that recorded by Dr. Wallin, who met them near Akaba in 1848. Of the Egyptian Aulad Okba it is said that many passed westward into and beyond Tripoli, while those remaining between the delta and Siwah became known as the Aulad Ali, probably the most powerful tribe of the Libyan desert. The Aulad Okba are also found in the Sudan, where it is agreed that they constitute the foundation upon which the present tribal structure of the Kababish has been built.<sup>2</sup>

There does not seem to be any record of the date at which the Kababish reached Dongola Province, where they are now found in substantial numbers; but since the Lawahiin section of the Guheyna reckoned themselves Kababish until a few years ago, the history of the Guheyna may be used to supplement what I have

<sup>1</sup> The negro element must not be forgotten. All camel-owning nomads possess slaves, and with few exceptions all have a larger or smaller infusion of negro blood, though the amount varies even in the different divisions of the same tribe, the richest divisions—i.e., those possessing the most slaves, tending to contain the highest proportion of members with negroid characters. Thus among the Kababish, the Nurab (the richest division) and that of the sheykh contained far more negroids than the Berara division, the fairest-skinned and least negroid of the Sudan Arabs I have seen.

<sup>2</sup> Traditionally, the ancestor of the Kababish was one of the *Ashab* ("companions" of the Prophet) of the name of Okba.

already written. In the pre-Islamic period the Guheyna are found first in Nejd and then in the neighbourhood of Medina. They were early incorporated into Islam, and a portion still dwell in their ancient territory, but many of the tribe migrated to Egypt, where the little village of Dawar Juheyna is still considered to be inhabited by their descendants. They gradually advanced into Upper Egypt, where they played a considerable part in the Fatimid period. After a good deal of fighting they settled down peaceably with other Arab tribes around Akhmin. Members of the tribe are mentioned as early as the third century A.H. at Aswan, and it seems the tribesmen took a prominent part in breaking the power of the Christian kingdom of Nubia. Although the Guheyna are not heard of again until recent times, the fact that so many tribes trace their origin to Abdulla el Guhani seems to show that the Guheyna have played a considerable part in the history of the Arab Sudan.<sup>1</sup>

In 1912 I spent some weeks with the Nurab division of the Kababish in their dry-season quarters in the neighbourhood of the Kordofan-Darfur border. The following account of their physical characters is based on my notes and the measurements of fifteen men of the Nurab and Berara divisions.<sup>2</sup> The Kababish are of medium or tall stature, averaging some 1'70 m. (about 5 feet 7 inches), and though generally long-headed, with an average cephalic index of 74, mesaticephalic individuals occur; indeed, one man (No. 6) has an index of 81·4, and must therefore be classed as brachycephalic, though if it had been possible to examine his skull directly he would have been regarded as mesaticephalic. But even this man has a head which is obviously "long" when seen in profile, and the rise in index is due to the unusual breadth of his head; in other words, he probably has a larger head with bigger brain capacity than his fellows, and in this connection it is interesting to note that he is the tribal bard, or, more correctly, the chief composer of tribal lays in his section of the tribe. In any case, his high cephalic index must be regarded as unusual, and this view is borne out by the measurements of nine sedentary Kababish from Dongola Province taken by Mr. Oliver Atkey, F.R.C.S.,<sup>3</sup> not one of whom has an index as high as 79, or a head-breadth approaching that of the bard. The nasal indices of the Kababish vary considerably, i.e., there is a wide

<sup>1</sup> The history of the Kababish, as summarized above, is based on MacMichael's work, supplemented by my own notes and by information contained in the *Encyclopaedia of Islam*, art. Djuhaina.

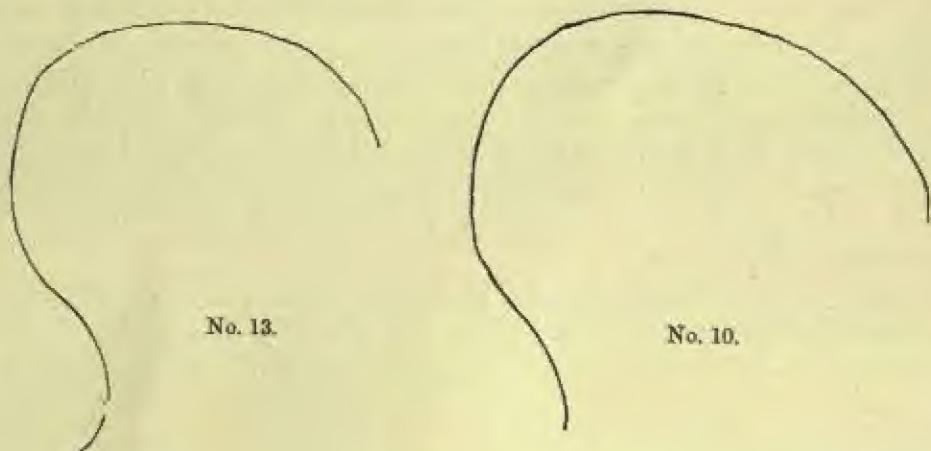
<sup>2</sup> The actual figures having already been published in this *Journal* (xliii, 1913, pp. 691 and 701), I need not give them again. I may, however, cite the average of the chief measurements and indices, which are as follows:—

H.L.	H.B.	Bil-zyg.	F.L.	N.L.	N.B.	Stature.	C.L.	N.L.	F.L.
196	145	135	120	54	38	1'70	74·13	87·76	89·04

The numbers in parentheses thus—(No. 6)—refer to the card number of the subject in the table of measurements in vol. xliii, p. 691.

<sup>3</sup> Mr. Atkey sent his measurements to Dr. Duckworth, who used them in a paper entitled *Contributions to Sudanese Anthropometry*, read in Section H of the British Association, 1912. I take this opportunity of thanking Dr. Duckworth for sending me a copy of the Kababish figures.

range of variation in features. This is greater than appears from the actual figures, for, as is well known, noses of quite different types may give the same length and breadth measurements. This variability is not only due to the considerable amount of negro blood in certain sections of the tribe, but also to an admixture with a stock having the Armenoid (Jewish) nose.



OUTLINES OF THE SHAVED HEADS OF TWO KABARISH (FROM PROFILE PHOTOGRAPHS).

The photographs reproduced on Plate XXXVII of the forty-third volume of this *Journal* show how great is the variability of feature, while there is an equally great range of skin colour; and though my observations apply especially to the Nurab and Berara sections, it is probable that they hold for the whole tribe. As already stated, the colour of the Berara is much lighter than that of the Nurab. The brother of the Berara sheykh—a very handsome man of over fifty, with a white chin-tuft—has a complexion which can only be described as pale wheaten. The skin on his chest is white, with no tinge of red. The lightest-coloured girls have a skin colour rather yellower than No. 6 of the *Notes and Queries* (1899) chart; they are certainly no darker, but lack the rather mustard-like opacity of the chart colour, which is replaced by a clearer and more transparent tint, suggesting amber or honey.

Negroid types, if they exist among the Berara, must be rare. I saw none, and there could be no doubt that both the Berara men and women, as groups, were less negroid than the Nurab. Fig. 7 of Plate XXXVII of the forty-third volume of this *Journal* reproduces the photograph of a Nurab who might have passed as a pure negro. Such extreme instances are uncommon, but many of the Nurab (including Muhammad Töm, the brother of the sheykh) show negroid traits of colour or of feature. Thus, Ali Töm, the sheykh of the tribe, though possessing delicate Arab features, including a straight, sensitive nose with particularly thin nostrils, is extremely dark-skinned. This quality seems fixed in the ruling family; his father, El Töm, was notoriously dark, while Mansfield Parkyns noted this characteristic in his grandfather, the celebrated Fadlullah. While the nose is

generally straight and sometimes aquiline, it is not usually as delicate as in Ali Töm, nor are the nostrils as thin. The more usual condition is shown in figure (No. 14) and in the Berara women whose photograph is reproduced (Plate XXXVII, fig. 8). Noses showing a good deal of "nostrilosity" (as in No. 9) are not uncommon, while in folk with typical Armenoid noses "nostrilosity" may be very marked. The face is generally long, or at least tends in that direction; in the women it sometimes has a charming oval outline. I have specially in mind a Berara girl about sixteen years old, whose wheaten-coloured skin, oval face, and delicate features were nothing short of beautiful. The cheek-bones are frequently somewhat prominent, the lips generally well formed, and seldom coarse or tumid, except in the frankly negroid.



ARAB OF TRIPOLI (MOCHI).

Mochi gives the chief measurements of a series of skulls from Tripoli in the National Museum at Florence.<sup>1</sup> These were acquired at different times, and clearly include representatives of two different classes. The first group of twelve includes skulls of both sexes with an average C.I. of 75·3, the extremes being 67·6 and 80·7. The second group consists of three male skulls with C.I. of 85·2, 85·3 and 86 respectively. These came from the old cemetery of Sciara Zaria, in the Menscia in Tripoli. Photographs of two of the most dolichocephalic of the skulls of the first group (Nos. 2013 and 2015) have been published by Mochi,<sup>2</sup> and the outline of one of these, having a C.I. of 70·4, is reproduced in the figure above. It is obvious that in general type this skull resembles R.C.S. 627 from Midian, and, to judge from the photograph, it is of the same rather massive character.

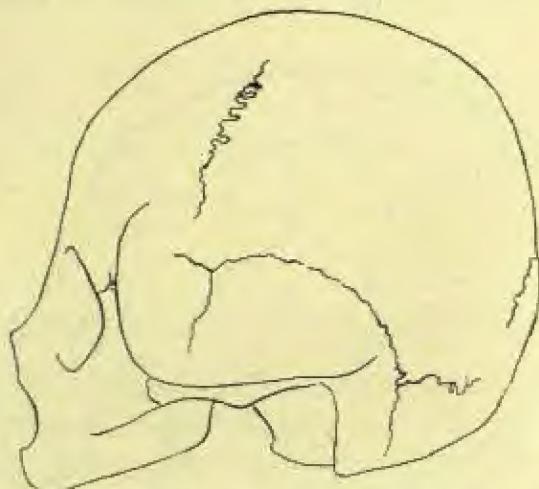
Remarkable as is the brachycephaly of the second group, it does not stand alone in north-eastern Africa. Giuffrida Ruggeri had described a series of skulls

<sup>1</sup> "Presentazione di crani d'indigeni di Tripoli," *Archiv. per l'Antrop. e la Etnol.* (Florence), x1, 1912, p. 381.

<sup>2</sup> *Sulla Antropologia degli Arabi*, Plates VIII and X.

excavated years ago by Professor Paolo Panceri in an "ancient Arab cemetery" at Abassieh, near Cairo.<sup>1</sup> These skulls—as was recognized by their discoverer—present a high degree of brachycephaly. Ignoring the skull of a child, the average C.L. of thirteen subjects is 85·3, while only three skulls have an index below 80, the average of the ten brachycephalic skulls being 87·1 (min. 83·4, max. 90·5).

With the exception of two of the Tripoli skulls, all these brachycephalic skulls are hypsicephalic. In this they resemble the skull from Oman, which, to quote Professor Giuffrida Ruggeri, to whom I sent photographs, "is very like skull No. 5111 of the 'Arab-Egyptian' series." An outline of this skull is reproduced, and its resemblance to the Oman skull will at once be obvious.



SKULL FROM EARLY ARAB BURIAL PLACE AT ABASSIEH, NEAR CAIRO  
(GIUFFRIDA RUGGERI).

The question naturally arises how far have the African Arabs maintained the physical character of the tribes from which they have sprung, i.e., have they undergone any considerable physical modification in their new surroundings? No general answer can be given, but in the case of the Arabs of the Nile Valley, the only group for which the necessary data exist, it seems that they have not. This is shown in the following table:—

	H.L.	H.B.	N.L.	N.R.	C.L.	N.I.	Stature.
Aulad Ali (20), Chantre ...	191	144	47	34	75·39	72·34	1·70 m.
Kababish of Dongola (9), Atkey ... ... ...	190·2	141·4	51·8	35·5	74·5	68·8	1·71 m.
Kababish of Kordofan (15) C. G. S. ... ... ...	196·1	145·4	54·4	37·8	74·13	70·2	1·70 m.

<sup>1</sup> "I Crani Egiziani antichi e Arabo-Egiziani dell' Università di Napoli," *Atti della Società Romana de Antropologia*, xv, 1910, pp. 112 et seq.

All these groups are dolichocephalic, of practically the same stature, with cranial indices verging on mesaticephaly. Their nasal indices differ but little; and considering that the measurements were taken at different times by three observers the general agreement in the absolute measurements may well be greater than the figures suggest. The rise in nasal breadth of the Sudan Kababish and their greater head-length might be accounted for by the fact that the greater number of their slaves are long-headed Nilotes, but this would not account for their increased nasal length, which seems too great to be due to personal factors in measurement. That the comparison of the Aulad Ali and the Kababish is valid and that their similarity is no matter of chance coincidence will, I think, be admitted when it is remembered that both tribes trace their origin to the Beni Okba.

It is now possible to appreciate the significance of the brachycephalic skulls from the ancient Arab graveyard near Abassieh. Their form is but an expression of the brachycephaly of the inhabitants of Southern Arabia persisting in new localities to which they had migrated. In other words, the burial ground near Abassieh was the last resting place of a family or clan from Southern Arabia.<sup>1</sup> If this explanation be accepted there naturally follows the suggestion that the smaller group of brachycephalic skulls from the Tripolitan burial should be explained in the same way, though here there is nothing—so far as I am aware—to show that the skulls are of mediaeval date. And if this view be accepted, then how far are the "islets" of short round heads found along the North African littoral and even inland susceptible to this explanation?

Bertholon and Chantre, in their map of Tripoli, indicate that the greater part of the country has a cephalic index of from 73 to 76. The index in the littoral region some miles west of Tripoli city falls to 71–72, yet just to the west of this region of pronounced dolichocephaly is an isolated area round Bou Adjilat in which the C.I. rises to 80 or over. Again, zones of brachycephaly extend across the southern portion of the island of Gerba, and there is also an isolated area of brachycephaly in the north of the island. Similar isolated areas occur in the *sahel* of Tunisia, inland in Algeria, in the Atlas Mountains, and to the south of the Shott el Hodna.

How far are these brachycephals the descendants of the short brachycephals of South Arabia?

<sup>1</sup> The occasional appearance of brachycephals among dolichocephalic populations is quite another matter—at least, among the populations now under discussion. Where the general type is preserved (as in the brachycephalic Kabashi already alluded to) the variation—if so it may be called—is probably individual; where there is a change in type it is probably to be regarded as the result of the infusion of foreign blood. Thus of the two brachycephalic skulls from Sinai described by Giovannozzi (*opera*, p. 215) one is hypsicephalic and this, together with the fact that of seven adult skulls from Sinai two are brachycephalic, seems to point to their being of foreign origin, if not those of immigrants; indeed, Professor Petrie tells me that among the Sinaitic Arabs with whom he had to deal during his exploration of the ancient turquoise mines were a number having the "Semitic," i.e., Armenoid nose. Probably this characteristic feature is widely distributed throughout Northern Arabia, for Mr. Carruthers informs me that he noticed it at Teyma.

The average stature of the Tripolitan area of brachycephaly is 1·66 to 1·67 m., of Gerba 1·64 m., shading off to 1·67 m., and again 1·64 m. in the north of the island. In the Tunisian *sahel* the round heads are everywhere short of stature. In the brachycephalic area north of Sus the stature is 1·64–1·65 m., as it is south of Mahdia. In the Kabyle hills short stature far outspreads short skulls, but the most brachycephalic area, that of south Kabylia, is also the area of shortest stature, while the big area of brachycephaly south of the Shott el Hodna is, in part at least, an area of moderate stature. Thus the African brachycephals are short and in this respect as well as in head form resemble the inhabitants of South Arabia.

It would seem, then, that at least a *prima facie* case can be established for the suggestion that the North African brachycephals owe the form of their skull to the influence of immigrants from Arabia, and this view is supported by certain historical considerations. The conquerors of Spain came from North Africa, and so large a number of the invaders were of South Arabian origin that the Yemenite party in their new country were able to carry on the tribal wars of their old home on a considerable scale. It seems safe to deduce from this that at least a part of the Arab colonization of North Western Africa was due to settlers from South Arabia, reinforced no doubt by a proportion of Southern Arabs, or their descendants when the Arabs were driven out of Spain. On the physical side the argument in favour of the North African brachycephals being the descendants of Arabian immigrants is supported by the observations of Bertholon and Chantre. These authorities note that the heads of the African brachycephals are not globular as are those of European roundheads, that the anterior part of the skull is less developed, that the occipital region is flattened, and that the cranial vault is often very high (*sureélevé*). They agree that in general appearance (*aspect*) these skulls resemble those of the brachycephals of Asia Minor rather than of Europe, yet they seem to consider that the short brachycephals of North Africa are more closely related to the brachycephals of France [Alpine race] than to those of Asia Minor [Armenoids], neglecting, as it would seem, the anatomical evidence they themselves bring forward, and basing their opinion on the correspondence in measurements and indices in spite of the fact that they recognize that the reduction of the degree of brachycephaly in certain round-headed African populations is due to crossing with short dolichocephals<sup>1</sup> [Mediterranean race].

In considering this matter it must not be assumed that the same influences have been equally in action throughout Northern Africa, alike inland in the Kabyle hills, and in the coastal zone. With regard to the latter, it must not be forgotten that for a period of 200 years from the end of the fifteenth century onwards, the North African coast was the adopted home of the Barbary pirates, who at the height of their power were so strong that though occasionally defeated by the Christian Mediterranean powers they were never broken. Moreover, it is known that Gerba was one of their strongholds. Yet even if it be granted that the Turkish pirates

<sup>1</sup> *Op. cit.*, pp. 175, 176.

recruited from all over the Levant exerted some influence on the head form of the littoral their dominion did not extend inland, and they could have had no part in producing the brachycephaly of the round-headed mountain tribes of Kabylia. Moreover, the photographs published by Bertholon and Chantre show that Armenoid noses occur in a certain number—not, it is true, a large one—of Algerines, natives of districts remote from the coast. This again seems to point to Arab influence.

It is obvious that the time is not yet for any authoritative statement concerning many of the points touched upon in this paper, yet certain conclusions emerge:—

- (1) The population of Northern Arabia is predominantly long-headed, that of Southern Arabia round-headed.
- (2) There is reason to believe that Mesopotamian cultural influence was exerted in South Arabia at least as far back as the first half of the first millennium B.C.
- (3) Part at least of the brachycephals of Southern Arabia conform in skull form and facial characters with the Mesopotamian type, and on the evidence of Sabaean coins this was the case 2000 years ago.
- (4) The occurrence of skulls of Mesopotamian type in an ancient Arab graveyard in Egypt, and in Tripoli, in the midst of predominantly long-headed populations, may be explained by regarding these as immigrants from Southern Arabia (or their descendants), though so far as Tripoli is concerned the influence of "Barbary" pirates cannot be excluded.
- (5) It may be suggested—as a matter for further research—that the brachycephaly of certain populations of the western half of Northern Africa may be due to Arabian influence.

It is my pleasant duty to acknowledge the assistance I have received from Dr. Arthur Keith, F.R.S., who unreservedly placed at my disposal the treasures of the Museum of the College of Surgeons, of which he is guardian. My thanks are also due to Professor MacAlister, who allowed me to examine a large number of ancient skulls from Palestine, excavated by the Palestine Exploration Fund, as well as other skulls in the Cambridge Museum; while I am indebted to Dr. Deniker for information concerning the "Arab" skulls in the Museum of the Jardin des Plantes; and to Mr. Hill for permission to reproduce the Sabaean coins figured on Plate XI.

SKULLS FROM NORTHERN ARABIA.

1 Genève, octobre 1800.

### SKULLS, ETC., FROM PALMYRA.

Sex.	TH	Ht.	TAU	BLF.	DTYPE.	NL	NB.	OW.	O <sup>4</sup>	Bast-AWL.	Bast-Neudl.	AWL.	Q <sub>1</sub> .	TL	TR	UDL	Q <sub>2</sub>	TO	TH	UDL	Q <sub>3</sub>	TL	Q <sub>4</sub> .	AWL.	
♀	170	126	118	—	—	—	49	33	38	32	63	92	1145	741	69·4	—	46·9	84·2	98·9	Although the skull is small, even, for a female, it is certainly adult.					
♀	177	130	121	—	68	122	50	21	36	32	95	91	1280	76·8	68·4	55·7	42	88·9	95·8	Presumably female skull, small and delicate; <i>more or less</i> resembles orangutan's skull. Resembles Palomino's skull (No. 2) shown in figures 1-4 of plate illustrating Blake's paper, <i>J.A.I.</i> , 1871, p. 314.					
♂	198	145	137	—	68	7122	47	26	38	32	104	99	1735	73·2	69·2	55·7	55·3	84·2	95·2	Apparently male, resembles No. 2 of Blake's paper.					
♂	203	145	135	—	77	7126	55	24	38	32	105	98	1740	71·4	66·5	61·1	43·6	84·2	93·3	Old male;	"Apparently part of an entire mummy; the face is in great part . . . covered with . . . the dried integuments."				
♂	200	146	124	—	—	—	—	—	—	—	—	—	—	70·1	69	—	—	—	—	—	Blake and Burton, No. 2, exceptionally well developed, <i>J.A.I.</i> , I (1871), p. 314.				
♀	171	131	111	—	—	—	—	—	—	—	—	—	—	—	74	64·9	—	—	—	—	—	Blake and Burton, No. 3, aged.			
Average	—	180·5	138·1	124·3	—	71	123·3	50·2	23·5	37·5	32	99·2	95	1476	73·6	60·2	57·5	46·9	85·3	95·8					

SKETCHES FROM YANKEE LAND.

### Senile, edentulous,

## DESCRIPTION OF PLATES.

## PLATE VII.

Skull from Midian.

## PLATE VIII.

Skull from Oman.

## PLATE IX.

Skull from Midian.

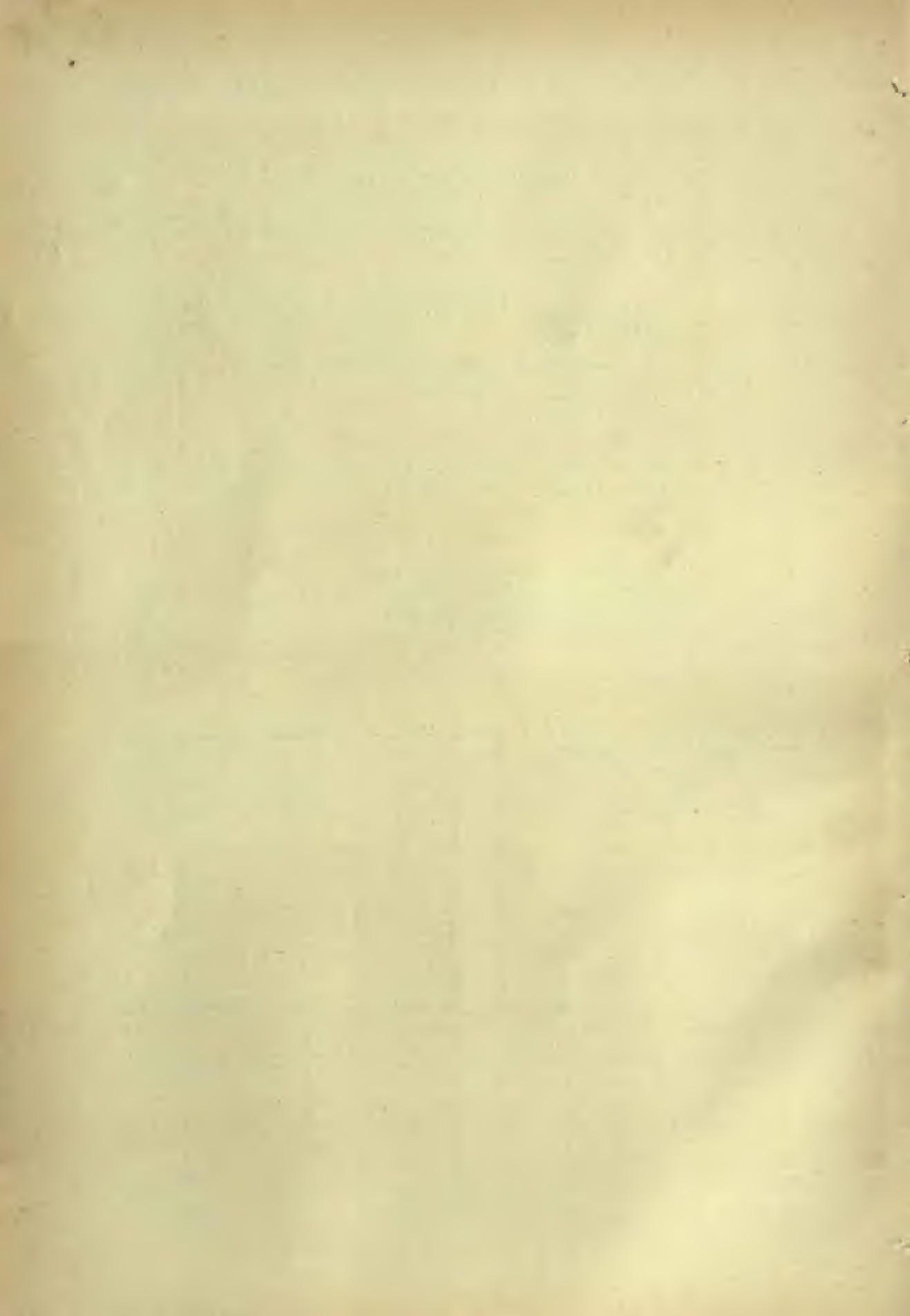
## PLATE X.

Skull from Palmyra.

## PLATE XI.

1. Engraved stone from near Teyma (Euting).
2. Monster from Medain Saleh (Euting).
- 3, 4. Sabaeen coins (Hill, somewhat enlarged).
- 5, 6. Arabs of Zanzibar of pure Maskat lineage.<sup>1</sup>

<sup>1</sup> I am indebted to Captain F. R. Barton, C.M.G., for permission to reproduce these hitherto unpublished photographs.





SKULL FROM MIDIAN (R.C.S. 627).  
THE PHYSICAL CHARACTERS OF THE ARABS.





SKULL FROM OMAN (R.C.A., BARNARD DAVIS 558).

THE PHYSICAL CHARACTERS OF THE ARABS.





SKULL FROM MIDIAN (R.C.S. 623).  
THE PHYSICAL CHARACTERS OF THE ARABS.

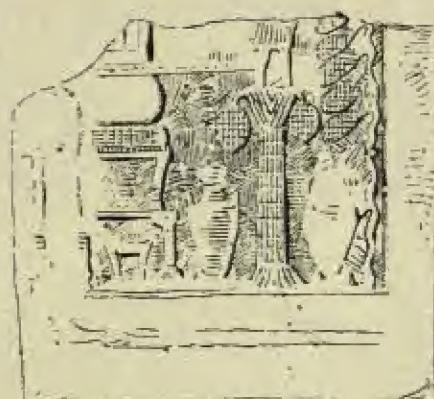




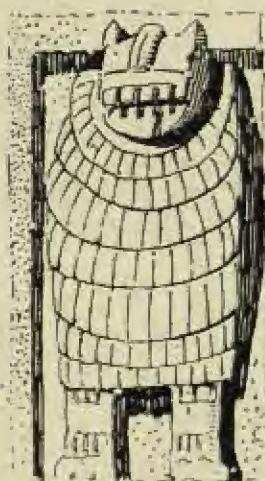
SKULL FROM PALMYRA (R.C.S. 623<sup>b</sup>).

THE PHYSICAL CHARACTERS OF THE ARABS.





1. CARVED SLAB FROM TEYMA.



2. MONSTER FROM NEAR MEDAIN  
SALEIL.



4. SABAEAN COIN.



3. SABAEAN COIN.



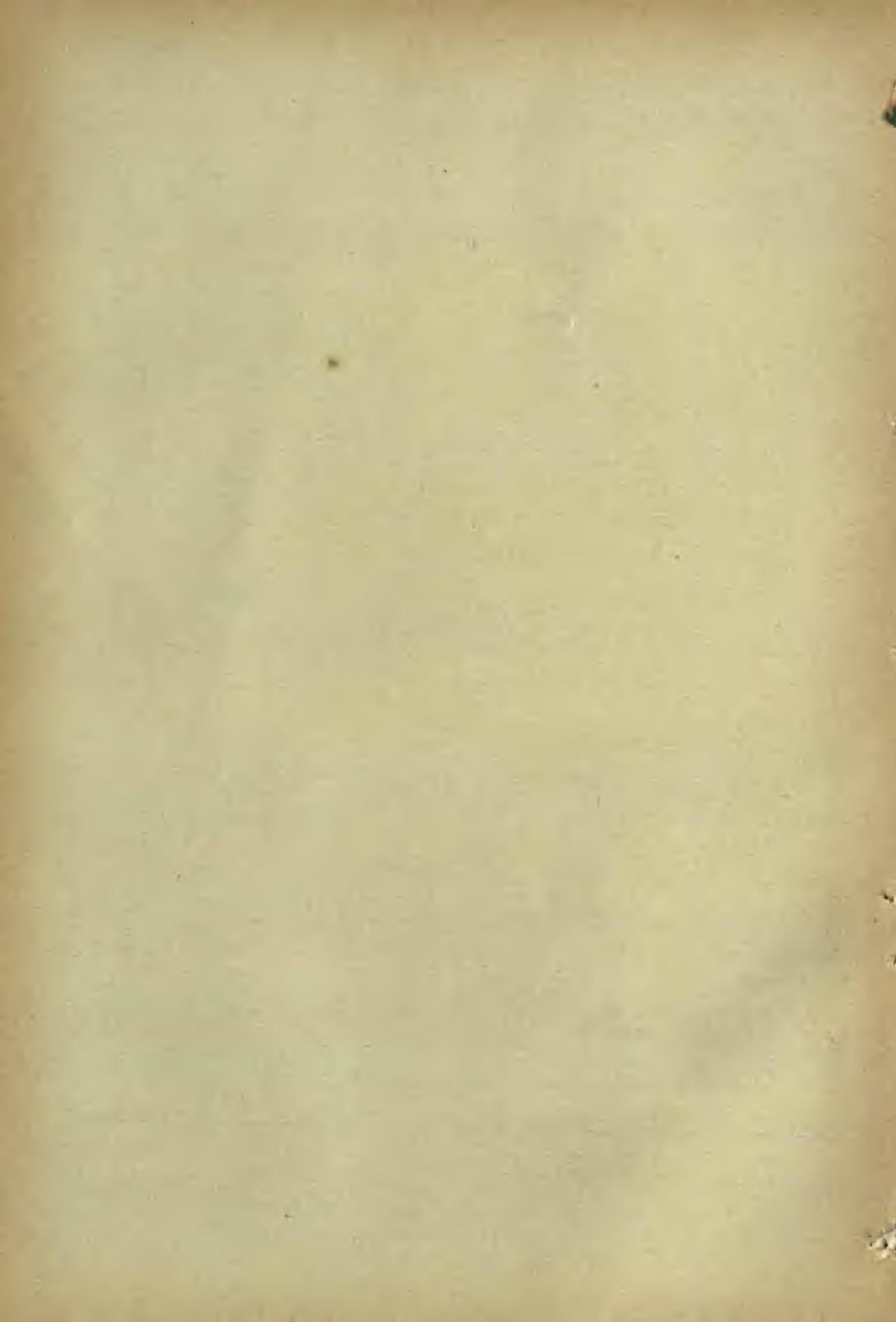
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ARAB (OF ZANZIBAR) OF ARISTOCRATIC MASKAT LINEAGE.



6

THE PHYSICAL CHARACTERS OF THE ARABS.



# THE PEOPLE AND LANGUAGE OF LIFU, LOYALTY ISLANDS.

By SIDNEY H. RAY, M.A., F.R.A.I.

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## 1. INTRODUCTION.

IN or about the year 1891, when endeavouring to obtain materials for a comparative study of the languages of Southern Melanesia, I had occasion to write to the Rev. James Sleigh, formerly a missionary in the Loyalty Islands, with respect to the language of Lifu. Our correspondence on the language was followed by a discussion of various ethnographical subjects, during the course of which Mr. Sleigh wrote for me answers to questions based upon Dr. Fraser's Anthropological Queries, as well as to others more directly concerned with my own studies. This correspondence forms the basis of the account of Lifuan Ethnography presented here. During the period of twenty-five years which has elapsed since the notes were written, no systematic description of any of the Loyalty Islands peoples has been published, and hence this account of the Lifuans, as they were when first known to white men, may be deemed worthy of preservation. For the sake of completeness I have added a few notes from French or English writers which illustrate or supplement Mr. Sleigh's account. Nearly all these relate to the people at or about the same period. I am also indebted to the Rev. J. Hadfield, Mr. Sleigh's successor at Lifu, for some additional notes.

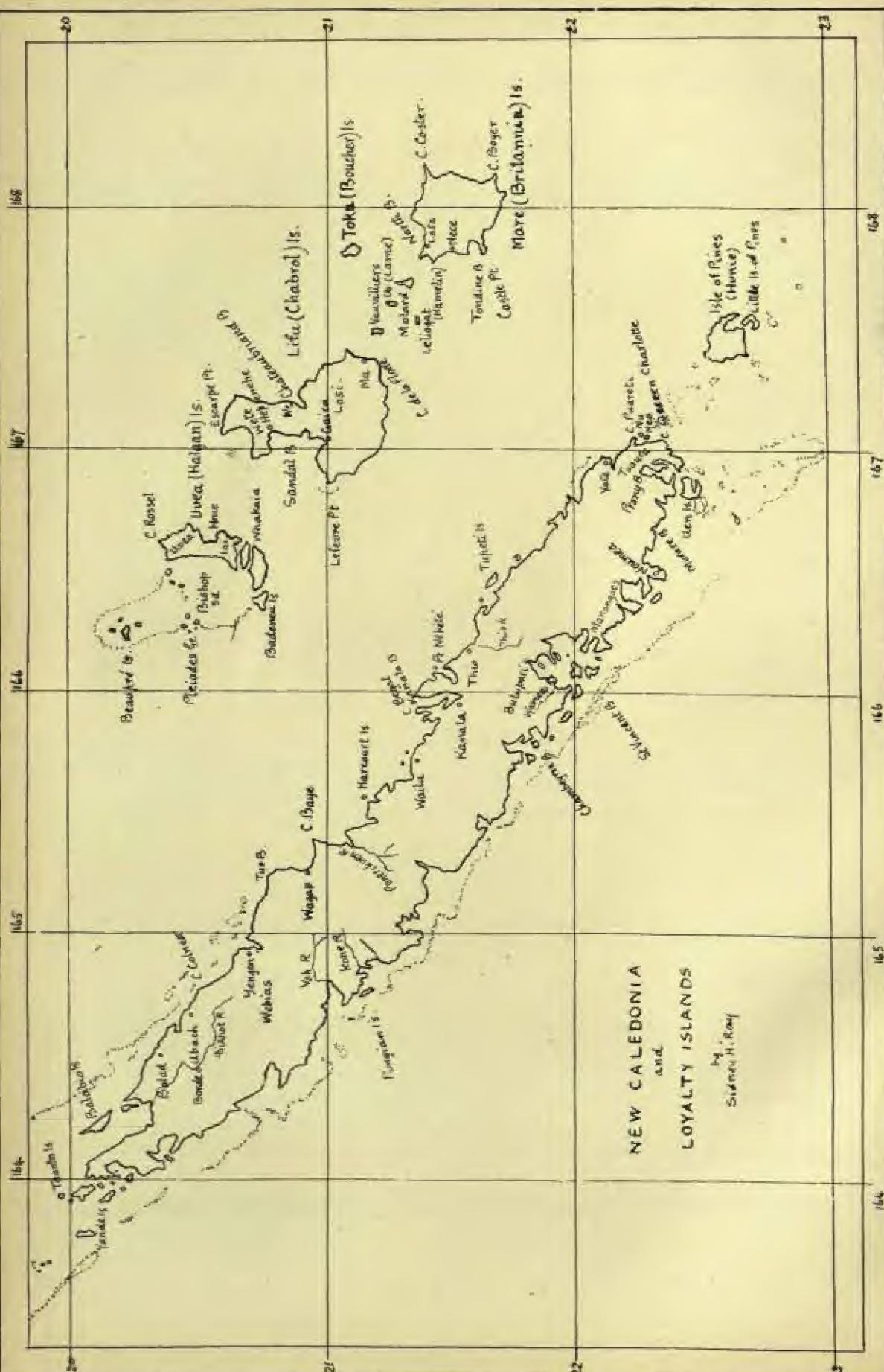
I had, unfortunately, no ethnographic material from the Rev. J. Jones, who wrote to me on the Nengone Language, nor from the Rev. S. Ella, who wrote on Iai, and thus have only been able to add a very few notes from the other islands of the Loyalty Group. New Caledonia has been occasionally referred to, for illustration or comparison.

In the Loyalty Islands and New Caledonia, as in so many islands of the Pacific, people and habits are rapidly changing. Old customs and beliefs are fast dying out, and the memory of them becoming lost. Unless some careful anthropological work is carried out before the elders of the present population have passed away, it will be impossible to acquire accurate knowledge of a condition of primitive society which will either compare with, or be in contrast to, that so admirably described by Dr. Rivers in the Northern Melanesian Islands, or by Dr. Seligman in New Guinea. An investigation of New Caledonian and Loyalty Islands Sociology would fill the greatest existing lacunæ in the Ethnology of the Western Pacific. I would urgently recommend it to the Anthropologists of the Franco-British Entente.

In the following pages I have given, whenever known to me, the native names of objects or practices, even when not mentioned by those who have described them. Most of these names were confirmed by direct enquiry from Mr. Sleigh, and are found in his vocabularies. They will, I hope, be found convenient themes upon which to base future enquiries.

Where no reference is given in the following pages the information was obtained





from Mr. Sleigh. Additions from other writers are given either as quotations or in footnotes.

The paper deals only with facts. No attempt is made to discuss in detail the relationship of the Lifu people to other populations of the Western Pacific.

## 2. GEOGRAPHY.

The islands of the Loyalty Group are situated in the Western Pacific Ocean, east of New Caledonia, from which they are distant less than 50 miles. Aneiteum, the nearest island of the New Hebrides, is a little more than 150 miles further east.

The chain extends from N.W. to S.E. between  $20^{\circ} 10'$  and  $21^{\circ} 40'$  S. lat., and between  $168^{\circ} 20'$  and  $168^{\circ} 20'$  E. long. There are three inhabited islands, Uea, Lifu, and Maré, and several uninhabited islands, the Pleiades and Beaupré, N.W. of Uea, and Mu (Vauvilliers), Uo or Lame, Hamelin or Leliogat, Molard and Toka (Tiga or Boucher) between Lifu and Maré. All are "low flat coral islands, the north-western extremity of the group being still submerged and forming a prolonged line of dangerous reefs."<sup>1</sup> Seen from a distance the islands appear as a row of isolated plateaux almost of the same level, and only appearing a little above the water, no point being more than about 60 or 80 metres high.<sup>2</sup>

Lifu (native name *Dehu*), the largest and most populous island, is situated in the centre of the group about thirty-five miles west of Maré and about twenty-five miles east of Uea. It is about fifty miles in length, the greatest breadth being about forty miles. Though similar to Maré and Uea, Lifu is much higher, and is in some places from 200 to 300 feet high. The western side is a steep wall on which Captain Erskine observed rows of distinct lines resembling tide marks, the lowest not less than 60 feet above sea level. There are shoal patches along the shore, but neither a fringing nor a barrier reef.<sup>3</sup> There is no vestige of a lagoon.<sup>4</sup> The soil is carbonate of lime mingled with calcareous sand and smooth pebbles, with numerous holes and fissures, which are filled with decaying vegetation, and form the plantations of the natives. Caves with stalactites (called by the natives *amajo*) abound.<sup>5</sup>

Maré (native name *Nengone*) is the easternmost and second largest island, but is only from 60 to 80 miles in circumference. It is low and flat, though the surface is somewhat diversified by coral blocks and clumps of pine. In some parts, instead of the high coral cliff, there are tracts of low ground sloping down to a sandy beach. There are no harbours and the only anchorage is a wide bay (North Bay) opening to the north, which affords shelter from the prevailing winds.

<sup>1</sup> Erskine, *Journal*, p. 17.

<sup>2</sup> Jouan, *Notice*, p. 364.

<sup>3</sup> Erskine, *Journal*, p. 362; Rochas, *Iles Loyalty*, p. 14.

<sup>4</sup> Rochas, *Iles Loyalty*, p. 10.

<sup>5</sup> "Nous avons remarqué dans nos promenades sur cet île (Lifu) que souvent le sol sonnait creux sous nos pieds; il est probable qu'alors nous passions au-dessus de quelque grotte souterraine." Jouan, *op. cit.*, p. 365.

Uea (native name *Iai*), more correctly spelled Uvea, French Ouvea, consists of two closely adjacent islands at the western end of the group. The northern island, Hnie, is a long curved strip of coral formation, thirty miles long, about three miles wide in some places, and about 150 feet high. It is separated from the southern island of Whakaia, not half so long, by a narrow strait. The two larger islands are surrounded by about twenty smaller islets. Uvea is properly only the name of the Polynesian people on the northern part of Hnie, who are said to have come from Uvea or Wallis Island, north of Tonga, between Samoa and Fiji. Nearly all the accounts of the people of this part of the Loyalty Group relate to the Polynesians of Uvea.

Though the islands of the Loyalty Group are thickly clothed with bush, there are few large timber trees. The vegetation resembles that of New Caledonia, the principal trees being coco-palms, banyans, pines, and sandal-wood, with bananas, hibiscus, papaw, malay apple and *Abrus precatorius*. The only indigenous mammals are a small native mouse and a large *Pteropus* like that of New Caledonia. Birds are not numerous, but there are parroquets, pigeons, ducks and fly-catchers, with frigate birds, gulls and boobies. The reptiles are lizards and large turtles. Whales, sharks, the conch, and bêche-de-mer are found in the waters. There are two seasons: from May to January soft breezes blow from the east and south-east, sometimes interrupted by a west wind. During the other months the weather is variable, with north-west wind, abundant rain and frequent storms. Shocks of earthquake occasionally occur.

### 3. HISTORY.

Captain Cook missed the islands of the Loyalty Group when he discovered New Caledonia in 1770, as did D'Entrecasteaux in 1793. The latter passed to the west of Uvea and discovered the island of Beaupré. "The discovery of Maré has been claimed for a Captain Butler of the ship 'Walpole' in 1800, and by others for the 'Britannia' in 1803, which latter name appears first on any chart as attached to one of the larger islands of the group. M. d'Urville states that in 1827, although the 'uncertain group of the Loyalty Islands' appeared on a chart of Arrowsmith's, M. Rossel, his hydrographer, doubted their existence, and their extent was certainly first ascertained by M. d'Urville, who connected his work (on the northern sides) with that of M. d'Entrecasteaux at Isle Beaupré, retaining the name of Britannia for Maré, and giving those of Chabrol and Halgan to Lifu and Uea."<sup>1</sup>

Dumont d'Urville visited the Loyalty Group in 1840, and a party of missionaries in the brig "Camden" in 1841, established two teachers at Maré, by the help of Taufa, a castaway from Ninataputapu in the Tonga Group. The teachers were Samoans, Tataio from Savaii and Taniela from Tutuila. The discovery of sandal wood shortly afterwards led to the visits of traders, strife with the natives, and massacres. When visited in 1849, the mission had made progress. Erskine in the "Havannah" visited

<sup>1</sup> Erskine, *Journal*, p. 18.

Lifu in 1849, and Inglis, afterwards missionary in Aneiteum, wrote an account of the voyage. Christianity was firmly established by 1852. The Rev. S. M. Creagh and Rev. J. Jones settled in Maré in October, 1854.

Lifu was not visited by a missionary ship until 1845, but two teachers who were placed on Maré in 1842 reached Lifu in 1845. One of these apostatized, but the other, Pao, aided by the blind chief Bula, though hindered by a white man, Cannibal Charlie, stuck to his post, and later other teachers were sent. An epidemic in 1849, which caused the deaths of some chiefs and many people, led to fighting and the temporary abandonment of the mission, but it was resumed and Christianity established in 1857. The Rev. S. Macfarlane and Rev. W. Baker were appointed by the London Missionary Society in 1859. Uvea was evangelized from Maré in 1856, and a French priest was there in 1857. It was visited by Macfarlane in 1860 and by Jones in 1863.

Roman Catholic priests landed in Lifu in 1859, and war broke out between Bula's son and Ukenezo, chief of the western half of the island.

The Loyalty Islands were annexed by France in 1864, and in the same year Roman missionaries landed in Maré. These aided the pretenders against the lawful chiefs, who were Protestants. There were restrictions on the Protestant missionaries,<sup>1</sup> and disturbances. French soldiers were sent to Lifu in 1864, and in 1869 the French priest blamed Mr. Creagh for a war on Maré at the end of that year, but a French Commission in 1869–70 held him guiltless.

Mr. Macfarlane's removal was demanded in 1869, and he left Lifu for New Guinea in 1871, being succeeded by Mr. Creagh.

There was another war in 1875 in Maré, and some of the native Protestant teachers were banished to Cochin China. A French Protestant missionary, M. Cru, was appointed to supervise the missions by the French Government in 1887.

Mr. Creagh retired from the mission in 1886 after thirty-four years' work in Lifu, and Mr. Sleigh retired in the next year. In 1887 also the Rev. J. Hadfield succeeded Mr. Ella (who had retired in 1875) at Uvea, and a French war-ship removed Mr. Jones from Maré.

Mr. Hadfield is now the only English missionary in the islands.

#### 4. ORTHOGRAPHY OF LIFU WORDS.

Lifu words in the following account are given in the orthography adopted in books printed for the natives:—

*Vowels:* *a* as in “hat”; *e* as in “get,” or long ē as *a* in “hate”; ē as *a* in “aspen,” and sometimes nearly as *a* in “father”; *i* as in “sing,” or long ī as in “machine”; *o* as in “bone”; ō as French *e* in “le,” not quite as *o* in

<sup>1</sup> The Rev. S. Ella was refused permission in 1864 to reside in Uvea as a *missionary*, but he was allowed to stay as a private resident. He commenced religious work in 1865 and had many hindrances until 1869.

"for," or *aw* in "awful," but shorter; *u* as *oo* in "cool." The sound of *u* in "butter" is wanting; Lifuans write *bata*.

*Consonants*: *b*, *d*, *dr*, *f*, *g*, *h*, *k*, *l*, *m*, *n*, *p*, *r*, *s*, *t*, *v*, *w*, *z*. These are sounded as in English, except that when following a vowel *b* and *d* are sounded with a slight nasal as *mb*, *nd*, and *t* is frequently trilled as *tr*.

Other consonants are: *c* as *ch* in "chin"; *j* as soft *th* in "the, this"; *ng* as in "sing"; *ny* as *ni* in "onion"; *q* as *wh* in "what," or a slightly aspirated guttural; *sh* between *s* in "sin" and *sh* in "shine"; *th* as *th* in "think"; *x* a strong guttural as *ch* in Scotch "loch"; *hl*, *hm*, *hn*, *hng*, *hny*, as the simple consonant with a slight aspiration.<sup>1</sup>

Words quoted in Nengone are in native orthography. In this, *j* and *sh* are pronounced as in English, the other consonants as in Lifu.

In Iai, *kh* is used for the Lifu *x*; *hw* for the Lifu *q*; and *j* as in English. The *d* and *t* are sometimes nearly *dh* and *th*; *\** is a harsh guttural, like the French *eu*, and *bw* is also used.

## 5. PHYSICAL ANTHROPOLOGY.

Mr. Sleigh's notes contain no account of the physical appearance of the Lifu people. But Jouan has given a careful description of the non-Polynesian islanders of the Loyalty Group, which may be taken to apply generally to the Lifuans:<sup>2</sup>

"Cette population ressemble en général à celle de la Nouvelle-Calédonie ; mais, de même que dans cette dernière contrée, des mélanges ont modifié les types ; ainsi, à côté du noir aussi foncé que le nègre africain, on voit des individus dont le teint rougeâtre et les traits plus adoucis attestent l'infusion du sang polynésien. Les naturels qui ont le mieux conservé les traits originaires (espèce *nègre océanienne*, Desmoulins, *race papoue*) sont généralement de grand taille ; leur teint est noir brun, un peu couleur chocolat. Le front est fuyant, les pommettes un peu saillantes, le nez beaucoup moins épâté que celui du nègre d'Afrique ; les lèvres sont épaisses, mais non difformes ; le bas de la face n'est pas prognathe. Les oreilles sont grandes et déformées par l'habitude de percer le lobe inférieur d'un grand trou et de l'allonger presque jusqu'aux épaules. Les yeux sont grands, non bridés ; la conjunctive a une teinte un peu jaunâtre. Les dents sont belles, peut-être un peu grandes. Presque tous ont de longs poils sur la poitrine, les épaules et même le dos, de la barbe ; mais celle-ci, comme les cheveux, est par houppe éparses. Les cheveux sont longs et laineux ; ils les laissent croître de toute leur longueur et les portent

<sup>1</sup> In "Notes grammaticales sur la langue de Lifu," a different orthography is used; *u* is written for *w*; *ø* for *ø*; *lh*, *mh* and *nh* for *hl*, *hm* and *hn*; *ñ* for *ny*; *nd* for *d* (after vowel); *d'* and *dj* for *dr*; *t'* and *tj* for *tr*; *dh* for *j*; *gh* for *q*; *kh* for *x*; *y* and *c* for *c*. There are also nasal vowels, *ä*, *ë*, *î*, *ö*, *ü* and *æ*; aspirated vowels, *ha*, *he*, *hi*, *ho*, *hu*, *hü*, and *hoe*; and vowels with open sound *å*, *ë*.

<sup>2</sup> They (the Lifu people) are very similar in appearance, character and habits to their neighbours on Maré. Murray, *Missions in Western Polynesia*, p. 326.

ébouriffés ou tombant de chaque côté en longue mèches frisées, ou bien encore ils les redressent en l'air et les enveloppent d'une pièce d'étoffe, qui leur fait comme une espèce de shako cylindrique. L'usage de teindre les cheveux avec de la chaux est très-répandu, ce qui les fait rougir ; quelques-uns par l'usage continual de ce procédé, les ont blonds et même presque blancs. Le bust des hommes est large, bien proportionné ; cependant nous avons remarqué un assez grand nombre d'individus ayant les épaules hautes et le cou court. Le mollet est plus prononcé que chez les nègres, et les pieds, au lieu d'être grands et plats comme ceux de ces derniers, rappellent les petits pieds de la race polynésienne.

"Les traits des femmes sont moins réguliers que ceux des hommes. Leur seins piriformes, flasques et pendants de bonne heure, leur tête rasée, leur physionomie hóbétée, leur allures bestiales, en font quelque chose de hideux. À peine quelques jeunes filles pourraient-elles se sonstraire à ce jugement sévère, mais les rudes travaux auxquels elles sont soumises les ont bientôt dégradées."<sup>1</sup>

Erskine thought the people of Lifu were not much different from Ueans (*i.e.*, Uveans),<sup>2</sup> and Cheyne remarks that the complexion of the people of Uea "lies between that of the black and copper coloured races,"<sup>3</sup> and says that the Lifuans are about the middle size and exhibit much variety of figure. Their complexion is that of a chocolate colour. Their hair is frizzled ; and besides the very long bushy beards and whiskers worn by many, they have a great quantity of hair on their bodies.<sup>4</sup> Erskine notes that the women's hair is cropped short,<sup>5</sup> but Cheyne says that both sexes wear their hair long.<sup>6</sup>

Finsch describes two men and a woman of Lifu : "Wedschi, gen. Peter. Kräftigen Mann von ca. 27 Jahren ; helle Varietät, fast wie Nr 30 (*i.e.*, of Broca's scale) aber der Gesichtsausdruck ganz Melanesisch, ebenso die Beschaffenheit des Haares, das schwarz ist ; Bart schlicht, schwarz, an der Spitzen in's Rostbraune. Ein andere Lifu-Mann hatte schwarzes, lockiges Haar, schwarzen, schlichten Kinn- und hellblonden Schnurrbart ; Augen lichtbraun. Eine Frau von Lifu, sehr dunkel (*circa* No. 43), und von durchaus melanesischen Typus, besass schwarzes, schlichtes Haar, ganz wie bei Europäerinnen."<sup>7</sup>

Pickering, on the United States Exploring Expedition, noted the likeness of New Caledonians and Fijians,<sup>8</sup> and a Lifu boy was exhibited at a meeting of the Ethnological Society in mistake for a Fijian.<sup>9</sup>

A much better account of the physical anthropology of the Lifuans than any of the preceding is that made in 1893 by Deniker and based on the observations of Dr. François.<sup>10</sup> The latter measured ten natives, all males between the ages of

<sup>1</sup> *Notice*, pp. 369–370.

<sup>2</sup> *Journal of a Cruise*, p. 367.

<sup>3</sup> *A Description of Islands*, p. 24.

<sup>4</sup> *Description*, p. 14.

<sup>5</sup> *Journal*, p. 367.

<sup>6</sup> *Description*, p. 15.

<sup>7</sup> *Anthropologische Ergebnisse*, p. 63.

<sup>8</sup> *The Races of Man*, London, 1872, p. 160.

<sup>9</sup> Latham, *Varieties of Man*, p. 262 ; Erskine, *Journal*, p. 368, note.

<sup>10</sup> *Les Indigènes de Lifou*, Paris, 1893.

eighteen and twenty-eight years. Two were natives of Leuci or Leussi (*i.e.*, *Losi*) in the south of the island, five were natives of Chepenehe, a village on the west coast in the northern part of the island, and three came from Gaotcha or Gadja (*i.e.*, *Gaica*), about 12 kilometres south of Chepenehe.

The mean height of the men measured by François was 1642 mm., 1 man was short, 1585 mm., 5 were below the medium, 1600 mm. to 1645 mm., and 4 above the mean, 1670 mm. to 1690 mm. Of the heads, 1 was mesocephalic with length-breadth index of 79.7, 1 sub-dolichocephalic, 77.2, 4 dolichocephalic, 70 to 74.6, and 3 hyperdolichocephalic 66.7 to 69.7, the mean being dolichocephalic.<sup>1</sup> Of the noses 1 was mesorhine, 4 platyrhine, and 5 hyperplatyrhine, the mean being platyrhine.<sup>2</sup> The colour of the skin approached that of chocolate with a reddish reflection and between 28 and 29 of Broca: 1 had light brown skin and 2 others were black (No. 27).<sup>3</sup> The hair of 6 individuals was black, but that of the 4 others was dark chestnut; 8 had frizzled hair, 1 had wavy, while that of the other was almost completely straight.<sup>4</sup> The diameter of the spirals (diamètre des tours de spire) is much greater (16–18 mm.) than that of the negro (2–3 mm.). The pilary system was feebly developed on the body in 7,<sup>4</sup> although half of them had more or less beard in spite of their youth.

The bodily measurements given by M. Deniker are as follows:—<sup>5</sup>

MESURES PRISES SUR 10 INDIGÈNES DE LIFOU (EN MILLIMÈTRES).

		Moyenne.	Minim.	Maxim.
Taille	...	1642	1585	1690
Tête: diam. antéro-postérieur	...	199	184	208
" transverse-maxim.	...	144	136	147
" bizygomatique	...	140	130	147
Nez: largeur	...	45	40	49
hauteur	...	46	41	51
Oreille: largeur	...	34	29	35
hauteur	...	63	60	67
Dist. entre les angles intér. des yeux	...	34	30	39
Bouche: " ext. "	...	95	89	103
Bouche: largeur	...	57	47	64

<sup>1</sup> Cf. these variations with those of the skull measurements by Quatrefages and Hamy. Of eighteen male and twelve female skulls one male and one female were subdolichocephalic, seven male and eight female were dolichocephalic, and ten male and three female hyperdolichocephalic. Cf. Craniology.

<sup>2</sup> In the skull measurements, the nose of eight males and three females was platyrhine, of six males and five females mesorhine, and of four males and three females leptorrhine. Cf. Craniology.

<sup>3</sup> Cf. Finsch in the account just quoted.

<sup>4</sup> This differs from Cheyne's statement. Cf. *Description*, p. 14.

<sup>5</sup> *Les indigènes de Lifou*, p. 794.

## MESURES PRISES SUR 10 INDIGÈNES DE LIPOU (EN MILLIMÈTRES)—continued.

	Moyenne.	Minim.	Maxim.
Dist. entre les deux acromions ... ... ... ... 319	305	345	
" " " mamelons ... ... ... ... 192	170	221	
" " " épines iliaq. ant.-s. ... ... ... 237	215	269	
" " " trochanters ... ... ... ... 282	260	300	
Main : longueur ... ... ... ... 202	180	216	
largeur ... ... ... ... 97	90	105	
Pied : longueur ... ... ... ... 263	250	280	
largeur ... ... ... ... 187	98	112	
Force de flexion de la main (dyn.) en kil. ... ... ... 45	35	60	
Indice céphalique ... ... ... ... 72.4	66.7	79.7	
" nasal ... ... ... ... 97.8	83.3	117.1	
Rapp. du diam. biaxom. à la taille = 100 ... ... ... 19.4	18.0	21.3	
" bitroch. ... ... ... ... 17.1	16.4	18.2	
" de la long. de la main ... ... ... ... 12.3	10.7	13.8	
" " " du pied ... ... ... ... 16.0	15.3	16.5	

There is no information by anyone as to whether the Lifuans possess the distinctive body odour attributed to the New Caledonian natives.<sup>1</sup>

## 6. CRANIOLOGY.

The craniology of the Loyalty Islands natives has been discussed by J. B. Davis, Bertillon, and Deplanche. Their measurements and results were investigated by MM. Quatrefages and Hamy, from whose work I extract the following summary:<sup>2</sup>

"CRÂNES DE MARÉ.—La population de cette dernière île, la plus méridionale et la moins explorée du groupe, paraît exclusivement Papoua. Deux crânes de Maré ont été rapporté en Europe, celui de la femme *Kué* qui fait partie du musée Davis, et qui est caractérisé de la même façon que la plupart de ceux qui viennent d'être étudiés,<sup>3</sup> et un second crâne du même sexe, assez peu différent du premier,

<sup>1</sup> "Un parfum acre, qui caractérise nos indigènes océaniens. Tous ne le possèdent pas au même degré. Mais il m'est parfois impossible de me pencher sur l'épaule de certains de mes élèves pour examiner leur travail : ils sont par trop odorants." Ph. Delord, *Mon Voyage d'enquête en Nouvelle Calédonie*, Paris, 1901, p. 148.

<sup>2</sup> *Crania Ethnica*, pp. 281–284.

<sup>3</sup> Principales mesures du crâne de *Kué*, femme de Maré (collection Davis) : cap. crân. 1395 c.c. ; d. a.-p. 0m. 182 ; d. tr. 0m. 126 ; front. max. 0m. 111 ; occ. max. 0m. 104 ; vertical (max.), 0m. 147 ; bizygom. 0m. 139 ; courbe horiz. tot. 0m. 502 ; front. tot. 0m. 126 ; par. 0m. 126 ; occ. 0m. 121 (*Thesaurus Craniorum*, No. 811, p. 309). [These are the French measurements given in *Crania Ethnica*, p. 281. Davis gives them thus: "Loyalty Islander. 'Kue' ♀, nat. c. 24. Island of Maré : Cran. capac. 70 oz., circumf. 19.8 ins., fronto-occipital arch 14.8 ins. (frontal portion 5 ins., parietal portion 5 ins., occipital portion 4.8 ins.), intermastoid arch 14.2 ins., longitudinal diameter 7.2 ins., transverse diameter (interparietal 5 ins., frontal breadth 4.2 ins., parietal breadth 4.7 ins., occipital breadth 4.1 ins.), height 5.2 ins. (frontal 4.6 ins., parietal 4.7 ins., occipital 3.9 ins.), length of face 4.4 ins., breadth of face 5 ins., length-breadth index .69, length-height index .72."]

trouvé par M. Dupouy à la baie du Nord et offert par lui à la Société d'anthropologie de Paris. La pièce de M. Davis a pour indice céphalique 69,23 ; celle de la collection Dupouy, 69,06 (d.a.-p. 0m. 181 ; d. tr. max. 0m. 125 ; d. bas.-bregm. 0m. 138 ; ind. haut. long. 76,24 ; ind. haut.-larg. 110,40).

“CRÂNES DE LIFOU.—La craniologie de Lifou est bien mieux connue. Le musée de la Faculté des Sciences de Caen ne possède pas moins de vingt-trois crânes de cette île ; onze d'hommes, dix de femmes et deux de jeunes sujets, recueillis par Deplanche pendant son séjour aux Loyalty, et dont M. Bertillon a fait l'étude en 1869,<sup>1</sup> étude reprise et complétée par nous quelques années plus tard.<sup>2</sup>

“Si aux vingt et un crânes adultes de cette remarquable collection on ajoute les deux pièces données au Muséum de Paris par le même chirurgien de marine, deux autres rapportées au même établissement par M. Balansa de sa mission scientifique de 1871,<sup>3</sup> quatre enfin faisant partie de la collection Marzioux, on aura les éléments des colonnes 3 et 4 de notre tableau XXVII, qui renferment les moyennes des dix-huit têtes d'hommes adultes, et des onze têtes de femmes que nous avons pu mesurer. En comparant, chiffre à chiffre, les Lifous avec les Fatés qui leur sont juxtaposés, on constate que si les dimensions de la boîte crânienne sont, à peu de chose près, les mêmes dans les deux séries, celles de la face offrent de la première à la seconde un certain nombre de modifications qui ne sont pas sans intérêt. Le nez s'allonge sans s'élargir à proportion, et l'indice nasal descend de 54,16 à 51,92.<sup>4</sup> Les parties latérales moyennes de squelette facial se développent en même temps ; la hauteur des os jugaux monte de 0m. 021 à 0m. 025, l'écartement des pommettes s'élève de 0m. 110 à 0m. 115, le bizygomatic maximum atteint 0m. 136, etc. Ces changements semblent bien être sous l'influence d'un croisement des Mélanésiens de Lifou avec les Polynésiens immigrés au dernier siècle de l'archipel Wallis sur l'île Ouvea, d'où le manque d'eau les force assez souvent à partir pour Lifou ou la côte voisine de la Nouvelle Calédonie.

“Les deux crânes de Lifous adultes du Musée des Chirurgiens de Londres, l'un

<sup>1</sup> Bertillon, *Forme et Grandeur*, pp. 250-288.

<sup>2</sup> Les vingt-trois crânes de Lifous, dix crânes de Poebo, douze de Kanala, et d'autres encore des Nouvelles-Hébrides, de Taïti, etc., forment avec quelques pièces intéressantes léguées par Dumont d'Urville, Rayer, etc., le musée anthropologique de Caen dont j'ai fait le classement en 1876. Tout le reste de la collection Deplanche est venu au Muséum de Paris, rejoindre celles déjà fort importantes que ce voyageur avait données à l'État il y a plusieurs années. [Note : loc. cit.]

<sup>3</sup> L'un de ces crânes fait partie d'un squelette complet. Il y en a un troisième, mais il vient, comme deux des crânes de Caen, d'un sujet n'ayant point atteint son complet développement. . . . Ils sont mesaticephales. [Note : loc. cit.]

<sup>4</sup> Deplanche insiste, dans les notes manuscrites que nous avons sous les yeux, sur les modifications que subit le nez chez les Lifous. Il a trouvé chez ces insulaires, dit-il, “des nez minces, effilés et n'ayant aucune ressemblance avec celui du Nègre.” Nos propres observations nous ont montré qu'il y a parmi les Lifous des individus dont les cheveux sont presque complètement lisses. Cf. Deplanche, *Ethnologie Calédonienne*, Caen, 1870, pp. 7-8. [Note : loc. cit.]

masculin (No. 5399), l'autre féminin (No. 5400), offrent également des proportions générales qui s'éloignent notablement des crânes Papouas purs. Sur l'un et sur l'autre, le diamètre transverse s'élargit notablement (0m. 138 et 0m. 135), et l'emporte sur le basilo-bregmatique (0m. 136 et 0m. 126). Les diamètres antéro-postérieurs étant 0m. 181 dans un cas, et 0m. 172 dans l'autre, les indices céphaliques se chiffrent par 76,24 et 78,48, 75,13 et 73,25, enfin 98,55 et 93,33.

“Les deux têtes de Lifous, Awita et Biat, que possède M. Davis<sup>1</sup> n'offrent rien que doive particulièrement attirer l'attention. Nous ne savons rien de précis des pièces de même provenance conservées au British Museum.<sup>2</sup>

“CRÂNES D'OUVÉAS.—Les trois crânes qui ont été recueillis à Ouvéa par la Société océanienne et donnés au muséum de Paris par M. Marzioux, ne présentent, pourtant, aucune trace de croisement. Ce sont des crânes du type Papoua le plus franc. Leur diamètres crâniens (d. a.-p. 0m. 189 ; tr. max. 0m. 129 ; bas. bregm. 0m. 136), et les indices correspondants (68,25, 71,90, 105,42) ; leurs circonférences et leurs courbes (circonf. médiâne totale 0m. 517 ; courb. front. 0m. 131, pariét. 0m. 133, occ. sup. 0m. 69, inf. 0m. 50, transv. sup. 0m. 298, tot. 0m. 426, horiz. 0m. 507) les diamètres céphaliques (diam. iniaq. 0m. 178, bitemp. 0m. 125, biauricul. 0m. 117, bimast. 0m. 102, front. max. 0m. 112, min. 0m. 95), et faciaux (biorb. ext. 0m. 108, int. 0m. 99, interorb. 0m. 28, bimal. 0m. 91, bizygom. 0m. 129), etc., leur assignent une place au nombre des Papouas les mieux caractérisés.”

From the Table XXVII referred to by Quatrefages and Hamy,<sup>3</sup> which compares the skull and face measurements in Faté, Lifu and Fiji, I quote only the indices as follows :—

INDICES CÉPHALIQUES.	<i>Fatés.</i>		<i>Lifous.</i>		<i>Vitiens ou Fidjiens.</i>	
	5 ♂.	1 ♀.	18 ♂.	11 ♀.	6 ♂.	6 ♀.
Long. = 100 { largeur ... ...	68·42	70·28	69·84	71·82	69·31	69·23
hauteur ... ...	73·68	77·71	73·54	74·58	72·48	75·27
Larg. = 100 hauteur ... ...	107·69	110·56	105·30	103·84	104·56	108·73
Fronto-pariétal ... ...	76·92	77·23	72·72	71·53	74·04	76·19

<sup>1</sup> Principales mesures de deux crânes de Lifous d'après M. J. B. Davis (*Thes. Cran.*, p. 309). Awita ♂, 25 ans., cap crân. 1462 c.c., d. a.-p. 0m. 177 ; d. tr. 0m. 132 ; front. max. 0m. 104 ; occ. max. 0m. 144 ; vertical (max.) 0m. 149 ; bizygom. 0m. 129 ; courbe horizont. tot. 0m. 502 ; front. tot. 0m. 126 ; par. 0m. 142 ; occ. 0m. 116.—Biat. ♀ 30 ans., cap. crân. 1631 c.c. ; d. a.-p. 0m. 193 ; d. tr. 0m. 126 ; front. max. 0m. 111 ; occ. max. 0m. 104 ; vertical max. 0m. 132 ; bizygom. 0m. 139 ; courbe horizont. tot. 0m. 527 ; front. tot. 0m. 134 ; par. 0m. 144 ; occ. 0m. 121. [These are the French measurements as given by MM. Quatrefages and Hamy. Davis gives them in English. MM. Q. and H. omit the sex of Awita, and give Biat as ♂. Cf. loc. cit.]

<sup>2</sup> *Catal. cit.*, pp. 1-2.

<sup>3</sup> *Crania Ethnica*, p. 283.

INDICES FACIAUX.	<i>Faïs.</i>		<i>Lifous.</i>		<i>Vitiens ou Fidjiens.</i>	
	5 ♂.	1 ♀.	18 ♂.	11 ♀.	6 ♂.	6 ♀.
Fronto-orbitaire	...	...	91·58	95·00	88·38	90·29
" jugal "	...	...	74·24	78·51	70·58	73·80
Orbitaire	...	...	84·61	86·84	85·00	89·47
Nasal...	...	...	54·16	51·06	51·92	50·00
Facial	...	...	69·09	62·81	63·38	68·25
					67·91	68·54

## 7. COLOUR VISION.

The Lifuan colour names are of some interest and I give here a list of all I have found in Mr. Sleigh's MSS. and translations. During the stay of the Cambridge Expedition in Torres Straits, and during his homeward journey, Dr. Rivers was able to test the colour vision of seven Lifuan natives, and Dr. Seligman also obtained names from another Lifu man in the Straits.<sup>1</sup> I have added these (which are spelled a little differently by Dr. Rivers, and usually have the adjectival prefix *ka*) to Mr. Sleigh's names, with the prefix *ka*.

*Lifu Colour Vocabulary.*

Colour. *La hane la ngōn* (lit. the mark of the appearance).

*Madra*, red (*madra*, blood). *n. kamada.*

*Wāxa madra*, reddish.

*Palulu*, red (*palulu*, to burn). *n. kapululu.*

*Pahulu xōt*, scarlet, crimson (*xōt*, something prominent).<sup>2</sup>

*Dela*, crimson. *n. dela*, brown, from *dela*, the reddish brown fur of flying-fox.<sup>3</sup>

*Mamadrai xōte*, blue (*mamadrai*, a red plant), also in Esth. i, 6, "violet" or blue.

*Ngōnemaea*, *maea ngōn*, purple. *n. maia*, green.

*Matrotro*, *hmattrotro*, brown, pale blue.

*Wetewet*, dark-coloured, black, brown (*wete*, mountain). *n. kawētēwēt*, black, blue.

*Hate*, green (also used for "uncooked").

*Theletha*, greenish. *n. theilifa*, green.

*Med*, *hmed*, yellow (*hmed*, turmeric, also used for "ripe"), *n. kamedimed.*

*Hneaju*, bay colour.

*Xuhao*, pale colour (cf. *hao*, mortar, ash of burnt bones).

*Wiauatesi*, *wiaqatesi*, ashen, pale (through fear or illness). Cf. *hnatesiji*, ashes.

<sup>1</sup> *Reports of the Cambridge Expedition*, II, p. 87.

<sup>2</sup> As, e.g., *xōte sind*, carving of wood.

<sup>3</sup> In the Bible translation (Is. i, 18), "maiene madra it'eje tene la dela, if red things like the *dela*," is used for "red like crimson."

*Eone*, dull white. Cf. *ngōni*, sand.

*Wīr*, *wiēwīe*, white. B. *kawia*.

*Qia*, grey (*qia*, grey hair).

I also find in Mr. Sleigh's notes and translations : *hane-ne-kōjony*, or *hane wene ngōni*, speckled ; (cf. *xōje*, excrement, *wene ngōni*, grain of sand) ; *xaxiej*, mixed colour (cf. *xaxau*, dust) ; *hnathapitipin*, *hnathatha han*, spotted (cf. *thatha*, to tattoo) ; *taidro*, *taiōm*, dim, faded, soiled.

Besides the words already quoted a few others are given by Dr. Rivers. *Kamunda*, red, is suggested as derived from a word for "ripe banana," but it may be the same as *hmed*,<sup>1</sup> yellow or ripe. A ripe banana is *waithi mede*. *Kahaith*, also given as *Kahathihathi*, yellow, brown, grey, are derived, as Dr. Rivers indicates, from *haji*, also *haj*, smoke, or *haji haji*, dim, obscure. *Kamhīnt*, used for orange and yellow, is probably *hmita*,<sup>2</sup> vomit. *Kahatuhatu*, *kuhathihal*, for green, appear to be variants of the derivative from "smoke," *haji*. Blue, indigo, and violet were called *bulu* (doubtless the English word), and *kamagau*, *kamungau* and *mungauchau*, of which I can offer no explanation, except that *chau* appears to be intended for *cahu*, near.

The use of *hmattro* for brown, and light blue, and of *mamadrai xōte* for blue, when *mamadrai* is a "red" plant, is interesting, especially as Dr. Rivers found clear indications of colour-blindness among the few Lifu men whom he examined. One man "called both red and indigo *kapalulu*, used by the others for red. Two men called both red and yellow *kamunda*, used by the normal individuals for red, and one of these called blue, indigo, and violet, *ngunamaia*."<sup>3</sup>

#### 8. TASTE NAMES.

The verb "to taste" is *deme tupāh*, i.e., kiss and try, but a noun is only formed by the name of the taste and the word *q'*, mouth ; as, e.g., *hnyapa koue la genge*, sweet to my mouth, a sweet taste. The following names are found in Mr. Sleigh's lists and translations :—

**SWEET.** The usual word is *hnyapa*, but "very sweet" is *hnemesiēne*.

**SALT.** The word for "bitter" is used for a salt taste. The word *alase* from the Greek  $\alpha\lambda\epsilon$ , is used for the substance : *la chaitene la alase*, the saltiness of the salt.

**ACID.** *Memeke*, tart, sour, gall, *hmengi*, sour. The gall in the body is *oshone*.

**BITTER.** *Hait* is given for bitter, pungent, salt (of sea). It is also given for "wormwood," which is also found as *shrojel* or *shojel*. The taste of European spirits is also said to be *hait*.

**ACRID.** *Xet*.

**PUNGENT.** *Cici*, *cicin*.

Other taste names are :—*gom*, nauseousness in the mouth, *hnyefelō* or *hnyewenjen*, insipid. Brackish water is *wacit*.

<sup>1</sup> Lifu *d* is often nasalized and pronounced as *nd*.

<sup>2</sup> Lifu *t* is *nt* in some words : *jid*, night, was formerly written *jint*.

<sup>3</sup> *Reports of Cambridge Anthropol. Exped.*, II, p. 87.

## 9. SMELL.

The word *pui* is used for an odour, pleasant or unpleasant: *pui loi*, a good smell; *pui ngazo*, a bad smell. A sweet savour or scent near the nose is *punepune*, if distant it is *songe*. A stink or ill savour is *pi*. The verb "to smell" is *hngölé-hngölène*.

## 10. MENTAL CAPACITY.

The natives of the Loyalty Group appeared to Rochas to be more intelligent, more active and enterprising, and better voyagers than those of New Caledonia,<sup>1</sup> but his statements appear to refer more especially to the people of Uvea, and probably to the Polynesians.

According to Mr. Sleigh the Lifuans were feeble in intellectual powers, and, in fact, thought of little besides food and women. A mere coincidence or sequence of events was regarded as cause and effect, design or result whether for good or evil. There was little speculation as to the causes of things, the usual reply to queries as to the makers of flowers or birds, etc., was, "our old men." These were the highest intelligences they knew.

When unwell they were apt to lose heart and hope. They thought they would die, and did die from no serious or definite disease.

This description probably no longer applies. Vollet, writing in 1872, says:—  
"Dans le trois îles ils sont très intelligents, savent presque tous lire et écrire et ont un degré de civilisation qu'on est étonné de rencontrer si près de la Nouvelle Calédonie."<sup>2</sup>

Some Lifu natives have shown a certain amount of force of character and intelligence. The teacher Mataika, placed by Dr. Macfarlane on Darnley Island in Torres Straits, on his own initiative, in 1872, commenced mission work in Murray Island, a task involving a considerable amount of danger. The first translations in the Murray Island language were no doubt based on his work,<sup>3</sup> while another Lifuan, Elia, translated a gospel into the Saibai language of Western Torres Straits.<sup>4</sup> Though these (Papuan) languages are far removed in structure from Lifuan, the imperfections in the translations are due to omissions rather than inaccuracies.

Some expressions in the Lifu vocabulary indicate a certain amount of observation:—

*Wawanefeneua* is a person who sows discord, from *wawa*, the name of a fish that lies in wait at the bottom of the sea, and rises suddenly to attack, disperse, or devour any fish swimming above it.

*Qenemada*, a garrulous person, from a man of that name and habit.

<sup>1</sup> *Iles Loyalty*, pp. 23, 26.

<sup>2</sup> *Renseignements*, p. 55.

<sup>3</sup> Cf. Ray and Haddon, *Study of the Languages of Torres Straits*, pt. I, pp. 524-525.

<sup>4</sup> Cf. *Reports of Cambridge Expedition*, III, pp. 187-189.

*Ka pē enieni*, poor, i.e., having no scales (as a fish : *pē*, no, *enieni*, scales).

*Wanamamik*, a trifle, literally “fruit of weeds.”

*Ate wenewej*, a flatterer, lit. *ate*, man ; *wenewej*, arrowroot.

*Qene hnageje*, inconstant, lit. *qene* mouth of *hnagejē* sea.

*Ithupejiang*, my enemy, reciprocally watching me with a club : *i*, reciprocal prefix ; *thupe*, to watch ; *jia*, club ; *ng*, pronom. suffix my.

*Pē hne mej*, a glutton, no place of satisfaction.

A man without a wife is said to be like a canoe without a rudder.

### 11. PHYSIOGNOMY. EXPRESSION OF THE EMOTIONS.

I note here a few methods of expressing the emotions which are described in the vocabulary :—

1. Actions with the head (*he*). *Hage*, to shake head in scorn ; *nangē*, to nod in assent.

2. Actions with mouth (*qe*). *Qejine*, to whistle and beckon with hand ; *qe j xōt*, to whistle in fear or admiration (*xōt*, to shoot out) ; *thinathinane*, to click in fear or admiration ; *tinatina*, to cluck in astonishment ; *aice* (chiefs', *simano*), to groan ; *demi*, to kiss (*idemi me*, to kiss with someone) ; *thuluf*, to smoke a pipe, to draw in the breath, or *ufi*, to blow (out smoke).

3. Actions with eye (*mek*). *Hnemeke*, *ihnemeke*, *isa mekēne*, to nod (? wink) or gaze as a sign ; *catemek*, presumptuous (*cate*, strong) ; *sheshēmeke*, presumptuous (*sheshē*, to fly) ; *leleēmek*, look ashamed (*leleē* ?) ; *goetranemeke*, to disregard, be indifferent to (*goe*, look ; *trane*, beyond) ; *maca meke*, prudent (*maca*, informed).

Action with the nose (*fij*). *Hnine*, to snuff at in refusal.

Actions with the hand (*ime*). *Xe*, to beat the breast in lamentation ; *ixeime*, to strike hands together ; *xexe*, *xexe hnatarapaine*, to clap hands for joy ; *xegan*, to clap hands once in astonishment ; *haliene*, to beckon with the hand.

Actions with the heart. The word used for “heart” is *hni* (chiefs', *hnatesi*), and is literally “the belly.” The physical heart is *wenethē hni*. *Hni tru*, proud (*tru*, great) ; *hnō hni*, irritable, cross (*hnō*, to hunt, catch) ; *hnimi*, love (*mi*, hither) ; *xomi hni*, patience (*xomi*, to take) ; *huelue hni*, doubt (*lue*, two) ; *cate hni*, presumptuous (*cate*, strong) ; *xeti hni*, stupid (*xeti*, thick, *xetizet*, full of leaves) ; *elēhni*, anger (*elē*, to ascend, go up) ; *goce la hni*, angry (*goce* ?) ; *hni hna thē fe*, or *itete thē fe hni*, broken-hearted (*hna*, past tense, *thē*, not, *fe*, with, *itete*, those who).

Actions with the spirit (*u*, chiefs *ua*). *Pate u*, despair (*pate*, lose) ; *sheshēhou*, despair (*sheshē*, fly away).

To show the buttocks in anger, or with friends jocularly, was called *kole koz*.

## 12. FAMILY LIFE. OCCUPATIONS.

According to Rochas<sup>1</sup> the family in Lifu is a little better constituted than in New Caledonia. The woman is less isolated from her husband and relegated to less inferior work. He suggests that this is perhaps explained by the influence of the manners of the yellow race (*i.e.*, Polynesians) brought in and mitigating the customs of the primitive inhabitants.

The women fish, hunt for shell-fish on the reef (*song*), work in the gardens,<sup>2</sup> seek water and wood, and get food (*xamoxamo xen*) from the plantations. They live in a separate house, and “elle a tout à craindre de la part d'un mari excessivement jaloux.”<sup>3</sup> Cheyne makes the same statement.<sup>4</sup>

## 13. PERSONAL ADORNMENT.

Lifu men bored the lobe of each ear, but an ear-ring was rarely inserted. The hole now serves as a convenient place for inserting and carrying a pipe.

Some individuals, men and women, were tattooed on the face, back, breast and arms in a variety of patterns. “Some of the men have figures of birds, etc., tattooed and coloured blue, on their arms.”<sup>5</sup> Most of the persons so tattooed were chiefs or persons of rank, and there is some doubt as to whether this is an indigenous custom. It may perhaps have been introduced by New Caledonians, Fijians or Samoans. The name *thata*, used for this practice, suggests derivation from the Samoan *tataau*.

Circumcision was not practised in Lifu, but men of New Caledonia split the prepuce.

The hair was sometimes allowed to grow long.<sup>6</sup> Young men desirous of being thought “swells,” changed the natural black colour of the hair to various shades of brown by a liberal use of lime (*hna sha etē*, cooked stone, *i.e.*, coral).

Damped white sand or lime dust was plastered under the eyes. The face was sometimes blackened with charcoal (*wanalep*) in long streaks, but there was nothing which could be called paint. The body was rubbed or daubed all over with various colouring substances, chiefly juices of plants. Women and girls coloured their faces with the fine blue dust from the wings of a large butterfly.

<sup>1</sup> *Iles Loyalty*, p. 24.

<sup>2</sup> Jouan, *Notice*, p. 373.

<sup>3</sup> Jouan, *loc. cit.*

<sup>4</sup> “The women appear to be kept in great subjection, and are made to cultivate and attend to their plantations.” *Description*, p. 15.

<sup>5</sup> Erskine, *Journal*, p. 368.

<sup>6</sup> In an address to the people of Houailou, New Caledonia, they are told not to imitate the Lifuans, who wear a long lock of hair on the side of the head. The men are advised to cut the hair, the women to wear it long. P. H. Delord, *Mon Voyage*, p. 173.

## 14. CLOTHING.

Men of Lifu wore no clothing, but for ornament wore round the body the vine of a kind of bind-weed. The name of the beautiful convolvulus-like flower of this plant—*wanaithihle*—after the introduction of Christianity and clothing, came to signify a heathen, and the adoption or rejection of Christianity was compared to the putting on or taking off of clothes.

The only dress of the women consisted of a grass petticoat or fringe wound several times round the loins.

Children of both sexes went nude for some years.<sup>1</sup>

A covering of cloth, *itrapet* (chiefs' *doz̄hetiē*) (Plate XII, 2), or garland of flowers, *ōlith*, or chain work, *hna wejemone*, was worn on the head. Cheyne states that “the men when going to war wear their hair wrapped up in tappa; at other times they have no covering over it, but take great pains to have it combed out in a mop-like form.”<sup>2</sup>

A basket or pouch worn as a “sporran” is described by Erskine.<sup>3</sup> Cloth was beaten from a woody kind of taro, *sesepeñ*. Cheyne says, “The tappa which forms the turban of the men is made from the bark of a tree, which, after being well soaked in water, is beaten out on a log and exposed to the sun to dry.”<sup>4</sup>

Flax is mentioned by Mr. Sleigh as though a native product, and is called *iat*; in the rough state it is *apiat*, and two hanks are called *wanapiat*.

Calico is now used and called *imāno* (chiefs' *imasia*). It is also known by the Samoan name *siapo*.<sup>5</sup> A garment is *ixete* (chiefs' *iōnīte*). Trousers are *i hue ca* (lit., two legs together).

<sup>1</sup> Mr. Sleigh does not mention the penis wrapper referred to by Jouan, who says: “Les hommes vont ordinairement tout nus, ou pour mieux dire ils ont trouvé moyen de se rendre plus indécents que ne le serait un nudité complète. Le costume, comme celui des Calédoniens, est capable d’effrayer la pudeur la moins farouche, et je ne saurais dire lequel des deux peuples est le plus inconvenant. (Caledonioi cum tela aut fronde mentulam celant, insulares Loyalty incolae vero tantum modo, lumbos cum foniculo cingunt mentula sublata et ad ventrem apposita.”) *Notice*, pp. 370–371. The same article is worn in the island of Tanna, New Hebrides. Cf. Rev. W. Gray, “Some Notes on the Tannese,” *Intern. Archiv. f. Ethnographie*, VII, 1894, pp. 229–230. It is figured in: Pastor O. Michelsen: “Om natur forholdene og de infidite på Ny. Hebriderne,” *Det Norske Geografiske Selskabs Årbog*, III, 1891–92, p. 10.

<sup>2</sup> *Description of Islands*, p. 15. His word *tappa* is the Samoan *tapa*, properly the white border of a *siapo*, but used in other Polynesian dialects for bark-cloth.

<sup>3</sup> *Journal*, p. 364. Cf. *Domestic Utensils*.

<sup>4</sup> *Description*, p. 16.

<sup>5</sup> *Mano* is no doubt the Melanesian word *malo*. (Cf. Codrington, *Melanesians*, p. 321.) The same word is used in New Caledonia. Délord has the following note: “*Manou*, pièce d’étoffe, généralement de couleur claire : rouge, bleue, jaune à grandes fleurs blanches. Il en faut 1 m. 50 à 2 m. pour faire un ‘manou.’ On serre cela autour des reins. Voilà un costume superbe et suffisant.” *Mon Voyage*, p. 158. “New Caledonians make two kinds of cloth. One from the bark of an articaceous shrub, the other from the bark of the banyan (*Ficus prolixa*).” Erskine, *Journal*, p. 368.

## 15. ORNAMENTS.

Ear-rings (*ane inengenyē* or *otruē*) were rarely worn. Necklaces (*finimeciue*) were formed of round pieces of *sio*, a green stone, "jade," imported from New Caledonia.<sup>1</sup> Necklaces (*finitia*) were also made of imported beads. Armlets or bracelets (*ane im*) were made of white shells from New Caledonia, bound on with pieces of plaited bat's down stained reddish brown.<sup>2</sup> Leglets (*eno ne lue ea*) were made of the same materials, and both these ornaments were much valued. Porcelain (?) beads were sometimes substituted for the shells. A knee ornament (*wasisi*) was made of a band of plaited bat's down and two or three small white shells.<sup>3</sup> Another ornament consisted of a plume of sea-birds' feathers surrounded by down from sea-birds.<sup>4</sup> This was called *tro-tro*, marching, lit. "go-go," and the name is now applied to the domestic cock in allusion to his comb and strutting. I find no mention of a hair ornament, pin, or comb, in Mr. Sleigh's notes.<sup>5</sup>

Every man wore on the middle finger of the right hand a small cord loop (*sep*) artistically woven. This served as a rest for the end of the spear or javelin when about to be thrown. (Plate XII, 3.)

## 16. HOUSES.

The ordinary house of the Lifuan was called *uma*, in the chiefs' language *enē* or *ēnēti*. Another name was *hnalapa*, in chiefs' language *hnamunē*, lit. a dwelling-place, from *lapa* or *mune*, to dwell. It was circular (*uma metro*), and much in the shape of a beehive. (Plate XIII, 2). The side walls, *trathithē*, were formed by thick upright posts from 4½ to 5 feet high, and one central pillar, *kapa*, supported a lofty and pointed roof, *hune uma*. The central pole was usually higher than the roof, and the projecting part (*hatene*?) was notched or in some way rudely carved, but never

<sup>1</sup> With regard to this stone, M. Garnier has the following note: "En Nouvelle-Calédonie, les indigènes aujourd'hui on ne savent plus faire les belles plaques de jade poli, auxquelles ils attachent tant de prix, on ignorent d'où elles viennent. En général, quand on leur demande où ils se sont procurés ces plaques, ils indiquent invariably comme lieu de provenance une localité très éloignée de leur propre territoire." "Excursion dans la partie sud-ouest de la Nouvelle-Calédonie," *Revue Marit. et Colon.* Paris, 1866, p. 907.

<sup>2</sup> The manufacture of this ornament in New Caledonia is thus described by MM. Veillard et Deplanche: "Quant à la tresse en poil de roussette, elle se fait de cette manière: deux fils très minces sont cordés comme à l'ordinaire, puis séparés jusqu'à leur extrémité, qui est retenue par un nœud; l'on place entre eux de petites pincées de poil, et on les tord ensuite sur eux-mêmes, il forme pour ainsi dire la charpente de la tresse. Pour la tiendre en rouge, ils emploient la racine d'un *Morinda*, dont le suc jaune traité par un lessive alcaline donne la couleur qu'ils préfèrent." "Essais sur la Nouvelle-Calédonie," *Revue Marit. et Colon.* Paris, 1863, p. 92. Cf. also Lambert, *Mœurs et Superstitions des Néo-Calédoniens*, Nouméa, 1900, p. 16.

<sup>3</sup> Cf. Jouan, *Notice*, p. 371.

<sup>4</sup> Cf. Jouan, *loc. cit.*

<sup>5</sup> According to Cheyne this was a mark of rank in Uvea. "The wooden hair-pricker or pin is worn as an indication of rank. The king wears it in the front of his hair, the chiefs a little on one side, while the lower classes have it tied round the neck and hanging down the back." *Description of Islands*, p. 24. The comb in Lai is called *ujam*.

as an image of a man.<sup>1</sup> Wall plates, *hmejize*, consisting of spars, were fastened round the tops of the side posts. The part of the wall opposite the doorway was called *hnexöt*, and the parts adjoining and on each side of the *hnexöt* were the *lue senē*. There was no wattling or plastering, and the walls and roof were thatched with grass. The entrance, *qehnelō*, was an oblong or square opening extending from the ground to the eaves.<sup>2</sup> The two door-posts, *lue sinete qēhnelō*, in some houses were carved, *trainenēz*, as a human face, *ialameke ne la ate*, and coloured red and black. The door-posts in common houses were rarely carved. The doorway was covered with one or two mats as doors, *la thingene qēhnelō*,<sup>3</sup> made of plaited coco-palm leaves, *ite idōne nu*, and had a threshold, *la öline qēhnelō*. The floor was covered with dry grass and mats.

Some of the larger houses had sleeping platforms (*ite ita*) against the inside wall all round. A few houses in places where mosquitoes were troublesome had an upper chamber, *hnahag' e koho*, for sleeping, separated from the lower part of the house by a flooring of reeds, but there was never more than one such apartment, and usually there were no partitions in a house.<sup>4</sup>

There was one fireplace (*hnacē*) near the central pole of the house. The hearth was merely a square portion of the ground, surrounded by four moderately thick pieces of undressed wood. The people sit or lie around the fire. There is no vent for the smoke except by the doorway.<sup>5</sup>

A large house was built at one end of the village. It was chiefly used as a sleeping place by the young men, with a few old men who supervised them, and also served as a place of conference and a guest house for visitors. This building was called the *hnchmelōm*, a name which suggests connection with the gamal (club house) of the Melanesian Islands to the north. *Hnchmel* is possibly the same word as *gamal*, and *ōm* may represent *uma*, house.<sup>6</sup> As a lodging-house the building was called

<sup>1</sup> Jouan describes them as round huts with a conical roof as in New Caledonia pierced by a high post carved and ornamented with shell work. *Notice*, p. 372. Lambert figures New Caledonian terminals, but these terminate in a grotesque human face. (*Plate XIV*, 1, 2.) (*Mœurs et Superstitions*, pp. 77, 121.)

<sup>2</sup> Jouan says "low and narrow," *loc. cit.*

<sup>3</sup> *Thingene* is derived from the verb *thingē*, to shut a door, to hide, probably "to cast so as to cover." The same word is used of casting a net, *thinge la élite*. To open a door is to divide (the mats), *thawa* (chiefs *thawangēti*), or *fē*, to pull out (i.e., the mats) from a doorway.

<sup>4</sup> The Uvean house described by Rochas was very different. "C'est un édifice en forme de carré long, pourvu de larges ouvertures dont les murailles en clayonnage sont crépies tant à l'intérieur qu'à l'extérieur, long d'un quarantaine de mètres sur 10 ou 12 de largeur. La toiture de chaume, à plan incliné, est soutenue par d'énormes traverses reposant sur des poteaux médians et latéraux qui n'ont pas moins de 0 m. 75 à 1 mètre de diamètre et 5 à 7 mètres de hauteur. Leur érection faite sans machine, et par la seule ressource de câbles en fibres de cocotiers de fabrication indigène, est un chef-d'œuvre d'audace, d'industrie et de vigueur." *Iles Loyalty*, p. 27.

<sup>5</sup> The English word "chimney" has to be translated *jēne haj*, way of the smoke.

<sup>6</sup> The chief's house on Uea (Iai) described by Rev. G. Turner, appears to have been very different from the Lifuan houses. He says: "It is 130 feet long and 30 feet wide. The posts

*eēkene la ite tenyica* (*tenyica*, stranger). A temporary shed used as a shelter from the heat was called *edrahche*.<sup>1</sup>

The missionaries introduced oblong houses with right-angled corners and a ridge pole. These had a sleeping apartment at one or each end, partitioned off by a reed screen, and had a fireplace in the middle. Speaking of these houses, Macfarlane says:—

"When we arrived they built them very low, without windows, and only one small door. Now, however, they are much higher, neater, and better, having two doors, two windows, and two rooms. They are built by placing posts firmly in the ground about 6 feet apart; to these the wall plate is tied, and between these smaller sticks are erected, and to these again others, about the thickness of one's finger, are put on horizontally and so close together that they almost touch each other. All are bound by strong native vines. The bark is peeled from all the wood, and even from the vines, and they are fastened together very neatly and with great regularity. Two long, forked posts are placed deeply in the ground, upon which the ridge pole is put and firmly secured by vines. The rafters are then raised, and sticks placed across them as below. The whole is covered with long grass or the leaves of the sugar cane, put on as country houses are thatched in England. Sometimes on the lower part mats are put between the sticks and the grass."

"The floor is covered first with plaited coconut leaves, then with well-made mats; the latter are also used for sheets and blankets."

"Around the house there is a fence (*hage*) formed of large, high posts (*hōc*) standing on their ends, and close together: this is to enclose a space in which they sit round a fire to talk and eat, preserved from the winds and from observation."<sup>2</sup>

The rail of the fence is *eni*, the gate *qanahage*. To make a fence is *traihithē*, *traihage*, or *sha hagine*.

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round the sides of the house, close to the eaves, are only 5 feet high, but they are about 9 feet in circumference, and from them run up the rafters, which are great beams, 4 feet round. The ridge pole is supported by a row of central pillars. The roof is thatched with grass. The back and ends and two-thirds of the front are wattled and plastered. The remaining third is open in front, and decorated on the outside of each post with five carved boards, each having at the top a human face painted red, and as if grinning at an enemy. Two additional figures project a few feet in front on either side, as the guardian spirits of the place, with a herculean wooden spear over their heads pointed to the entrance through the high palisade, a little way in front of the building." *Nineteen Years*, pp. 511-2.

<sup>1</sup> According to P. Lambert, the New Caledonians (of Belep) had several kinds of houses. He names: (1) The ordinary house; (2) the chief's house, distinguished by its greater height; (3) the assembly or guest house, built for festivals; (4) three kinds of dormitories (cases à couche); (5) a house for conversation and work; (6) the chief's storehouse. Figures of variously shaped houses are shown on pp. 6, 81, 123. (*Cf. Mœurs et Superstitions*, chap. xix.)

According to Veillard and Deplanche there were two kinds of chief's houses in New Caledonia, i.e., his dwelling house and the village guest house. There was also a store-house for yams. The chief's dwelling was high in proportion to his rank. Details of its construction are given. Cf. "Essais sur la N.C." *Rev. Marit. et Colon.*, 1862, p. 488 ff.

<sup>2</sup> *Story of the Lifu Mission*, p. 15.

## 17. DOMESTIC UTENSILS. TOOLS.

Iron was introduced into Lifu by the missionaries from Samoa, and is called *fao*.<sup>1</sup>

In carpentry the *thil* was used, an adze with a blade (*ze*) made of greenstone (*sio*)<sup>2</sup> bound at an acute angle to a handle with sinnet.<sup>3</sup> (Plate XIV, 3.) An axe (*nganga*) with a stone head was also used. A hammer was called *xeci*. The general name for knives is *hele*, probably introduced from Samoan *sele*, a bamboo knife. A stone knife was called *inehnē etē*, which is also the name for a razor. The *thithi*<sup>4</sup> was a wooden knife used for cutting taro and for culinary purposes. Scissors are called *ifizi*, from *fizi*, a small shell used for scraping taro, etc.

The Lifuans made no pottery, as they had no clay. For a calabash or bottle they used only the dried or hardened skin of the *wene ge*, the fruit of the *ge*, a kind of gourd. A long variety of this was called *aloj*. The basin, *inege*, was formed from the same fruit cut across about midway. "Calabashes for holding water are made of gourds neatly braided with fine coir senit."<sup>5</sup> Samoans introduced the wooden bowl or trough, hollowed out with a gouge or chisel, called a *kumete* (Samoan '*umete*).

Baskets or woven bags (*tengen*) were made. A small kind was the *walenge*. Mats were called *ixō*; sleeping mats, *gōhnē*, of a chief, *gōhnō*. I have no particular account of these.

Cord (*eno*) was made from vegetable fibres.<sup>6</sup> "Torches are made of dried coconut leaves tied up in bundles."<sup>7</sup>

An article partly useful, partly ornamental, is thus described by Erskine: "Each person carried a flat basket of not inelegant workmanship, either adorned with tufts of red worsted or of dark coloured threads made from the fur of the flying-fox. This basket or pouch was sometimes slung round the waist, hanging in front like the 'sporran' of a Highlander, and occasionally worn on the head, like a shade for the eyes, its position allowing it to remain dry when the owner is in the water. These baskets seemed to constitute almost all their earthly possessions, if we except calabashes for containing water, which are neatly slung with string of coconut fibre."<sup>8</sup>

<sup>1</sup> *Fao* is the Samoan word for a wooden peg, whence iron nails were also called *fao*. The ordinary Samoan word for iron is *uamea*. A plate or sheet of metal in Lifu is *ine fao*, a chain *eno fao*.

<sup>2</sup> This is described as dark green, with a mixture of red. Cf. *Ornaments*.

<sup>3</sup> Sinnet is the cord made from coconut fibre.

<sup>4</sup> Cheyne, *Description*, p. 16.

<sup>5</sup> In New Caledonia "ils emploient les fibres de diverses plantes pour leurs cordages; celles qui sont tissées avec de l'herbe portent le nom de *maon*; celles avec lesquelles on fait les filets, *wambilarara*; celles qui sont préparées avec la bourre de coco, *uyne* et *wionu*. Lorsqu'ils veulent faire une corde grosse (*dhiana*) ils réunissent plusieurs cordelles et les roulent ensemble sur la cuisse." Veillard et Deplanche, *Essais sur la Nouvelle-Calédonie*, 1862, p. 92.

<sup>6</sup> Cheyne, *op.cit.*, p. 16.

<sup>7</sup> *Journal*, p. 364.

## 18. FIRE.

Fire was obtained by the friction of wood, and was often carried to the plantation in a piece of bark. There is a tradition that a woman swam to a great distance and procured fire from another island. The natives slept around the fire and it was kept burning all night.

The first occupation of a house was called *athi e'*, literally "kindling fire," an equivalent of our house-warming.

## 19. FOOD.

The natives of Lifu ate almost anything not certainly known to be poisonous. Animal food (*gōni*) (on account of its scarcity) was greatly preferred, and so great was the craving for it that illness was often caused by partaking of fish known to be injurious. The pig was introduced from Samoa, and has the Polynesian name *puaka* (Samoan, *pua'a*). The staple vegetable foods (*gai*) were the yam (*koko*), with taro (*inagaj*), sweet potatoes (*kumala*), sugar cane (*wia*), and various fruits.<sup>1</sup>

What seemed to be a kind of earth was also sometimes (but rarely) eaten. This was really a vegetable substance resembling peat, but of closer and finer fibre.<sup>2</sup>

There was a certain amount of disinclination to make use of any food put in their way by an accident which has caused death. Mr. Sleigh was asked on one occasion to decide whether it would be right to eat fish and turtles which had been brought to land through an inundation at Mu which had destroyed many of the natives.

Food was cooked (*shaihi*) in the earth oven (*hnashainyi*). Owing to the absence of pottery water could only be heated in a calabash by means of hot coral stones.<sup>3</sup> Only unmarried persons were permitted to cook food.

<sup>1</sup> Their diet probably differed very little from that of the New Caledonians, and was extended in times of scarcity. Rochas says of the New Caledonians, "à côté du bananier et de la canne à sucre ils cultivaient l'hibiscus tiliaceus dont les jeunes tiges fournissent un aliment de peu de valeur auquel les Nouveaux-Calédoniens ne recourent qu'en cas de disette. Les indigènes des Loyalty y attachent une toute autre importance et paraissent faire entre ce mets dans leur alimentation journalière. On sait que l'écorce seule est comestible ; ils la mangent rotie ou crue. J'en ai goûté dans ce dernier état, et j'ai trouvé que c'était un substance mucilagineuse et presque insipide." *Iles Loyalty*, p. 22.

<sup>2</sup> With reference to the New Caledonians, P. Lambert has the following : " Il est certain que dans des circonstances rares, même sans être en temps de disette, ils émettent sous la dent et mastiquent, je ne sais pour quel motif, une pierre friable, grisâtre, tirée de flanc de la montagne et conservée quelquefois à la case. Serait-ce pour occuper les organes de la manducation et tromper la faim ? Je ne le crois pas. Volontiers je me range au sentiment de ceux qui pensent que les femmes en usent par superstition." *Mœurs et Superstitions*, p. 137.

<sup>3</sup> According to Cheyne : " Their food consists of yams, tarro, coconuts, bananas, sweet-potatoes, sugar-cane, and fish ; which they generally bake in ovens of heated stones ; although sometimes they boil their food in clay pots of their own manufacture." *Description*, p. 15. The last statement is probably erroneous, and if clay pots were used, they were doubtless importations from New Caledonia.

There were few restrictions in eating. Men and women ate together, and children ate with adults. After reaching puberty a man was not allowed to eat with his married sister. Aged persons who had lost their teeth would engage children, usually little girls, to chew food for them.

The chief claimed the right to eat first of new yams. Turtles (*seuen*) were regarded as his special food, as were bats or flying-foxes (*thihlē* or *retiap*) for the old men.

Food was given as a bribe to a man or woman to commit adultery, and was called *isaxenine* or *ishaxeni*.

#### 20. NARCOTICS.

The natives of Lifu do not drink kava, nor do they chew betel. Tobacco (*tepek*, from the French *tabac*) has been introduced, and is smoked (*ufi*, lit. blown) in a *paip* (English *pipe*). Smoking is indulged in to an immoderate and often injurious extent.

There is a shrub with a small bright red pod called *wene gerog* (*i.e.*, grog fruit) which is used as a condiment in cooking, like cayenne pepper.

#### 21. CANNIBALISM.

In former times the people of Lifu ate the bodies of enemies slain in war. They acknowledged that they positively liked human flesh,<sup>1</sup> and it was not merely eaten to express hatred, or to prove the completeness of a victory. A chief sometimes sent one of his followers to kill others of his subjects as food for him, and men of position were sometimes included among the victims.

It has been said<sup>2</sup> that the Lifuans were so fond "of human flesh that they would go at night and steal a corpse from its last resting place, cook, and eat it." No case of this kind came to Mr. Sleigh's notice, but it is referred to by Maefarlane, whose account of Lifu cannibalism may be added here :

"On Lifu the natives were exceedingly fond of human flesh. The chiefs were despotic and ordered their subjects to be clubbed and cooked at their pleasure. I have heard the natives speak of a time of severe famine when those men who had the greatest number of wives and children were considered to have the most food. Famines, no doubt, arose at times from natural causes, but most frequently from desolating wars, when plantations were destroyed. Sometimes the famine makers were ordered to cause a famine in order that the male population might live for awhile on human flesh. The dead were often exhumed to be cooked and eaten : and sometimes when a native was dying with plenty of flesh on his bones, some of

<sup>1</sup> Cf. T. Williams, London, 1870, *Fiji and the Fijians*, p. 179. "A large number (of Fijians) esteem such food a delicacy, giving it a decided preference above all other. The practice of kidnapping persons, on purpose to be eaten, proves that this flesh is in high repute."

<sup>2</sup> Rev. G. Drummond and Rev. W. Harbutt in *Samoan Reporter* (October), 1857.

those standing by would be rejoicing at the prospect of a feast, and arranging to steal the body.”<sup>1</sup>

Cheyne writes to the same effect: “The eating of human flesh is practised at this island from habit and taste, and not altogether from revenge; but from the mere pleasure of eating human flesh as an article of food. Their fondness for it is such, that when a portion has been sent some distance to their friends as a present, the gift is eaten, even if decomposition have begun before it is received.”<sup>2</sup>

## 22. HUNTING. FISHING.

Hunting can hardly be described as an occupation of the Lifuans, for there are no native mammals except rats and the flying-fox. The bow and arrow seem never to have been used in hunting or war, although known to the Lifuans. The arrow is called *pehna*, the bow *ta ne pehna* (rest or stand of the arrow), the string *then*. To shoot is to “pull” the arrow (*huje la pehna*), i.e., with the bowstring and let go, or *wenē* (chiefs’ *wenapejene*), to bend the bow.

Lifuan mice and foreign rats in the plantations are caught in a noose set by a spring.

Birds are snared (*hnō öni*, to snare birds) in nooses (*gene hnō*) and by birdlime, or are knocked down by short sticks hurled at them. In Mr. Sleigh’s notes *Ekoku* is mentioned as “a practice of extracting the teeth of young mice for decoying owls at night,” but there is no further explanation.

**FISHING** (*azen, nyi thō*).—Fish are caught in traps (*thit*). These have stones bound to them (*hnōe könyingen, hnōe tin*) as sinkers, and are taken up (*gi*) by means of a pronged instrument called *ñeite*. A seaweed (*drava*) eaten by turtle is used as bait. They also fish with hook (*gē*) and line (*eu*), with a kind of seaweed (*hlekō drava*) as bait. Nets (*eōte*), or pronged harpoons (*izoja*), or simple spears (*jo*) are also used. Nets and lines are made from a tree called *nime*. Fish are sometimes poisoned by means of a plant called *shojel*.

## 23. HORTICULTURE.

The soil of Lifu is not very fertile. It consists for the most part of disintegrated limestone interspersed with calcareous sand and smooth pebbles. Yet, no doubt owing to the moist climate, the island is thickly clothed with forest.

Plantations (*ite hna eēny*) are made where the decaying vegetation has formed plots in fissures and cavities of the naturally rocky soil, and most of the growth is of a very inferior kind. There are no streams on Lifu, and hardly any water but what is brackish, hence the crop often fails.

The chief vegetable productions cultivated are yams (*koko*), coconuts (*ono*), bananas, both native and introduced (the plant *metrun*, the fruit *wanawa*), bread-

<sup>1</sup> *Story of Lifu Mission*, pp. 6–7.

<sup>2</sup> *Description*, p. 15.

fruit (the tree *ōn*, the fruit *wen'ōn*), taro (*inagaj*) and arrowroot (*wenewej*). The sugar-cane (*wia*), sweet potato (*kumala*) and sago (*sago*) have been introduced. The fruit of the papaw is usually only eaten in times of scarcity, but it is commonly used as food for animals.

The bush is cleared by the axe and by fire, and the soil loosened (*trohnenyi* or *jē*) with a pointed stick (*wejē*). The yam tops (*feja*) are planted about the beginning of October and take seven or eight months to attain maturity. Dry grass is spread over the young plants to protect them from the excessive heat, and they are occasionally weeded (*wakōca*). The vines of the yams are trained (*eleng*) on twigs to keep the leaves from the ground and shade the plants. Before planting, the seed (*itine feja*) or a portion of the seed was presented to one of the *ite tene haze*<sup>1</sup> to be blessed.

A plantation is allowed to lie fallow (*iteijē*) for three or four years in order to recover its fertility. By that time the bush has grown (*macaj*) and the ground is (*bec*) fit for tilling again. The preparation for a second crop is called *thathaichniji*. The harvest (*umēne, menue*) was commenced only when the chief gave permission, and the first-fruits (*pane wene*) are brought to him (*iōlekeu*) in the *drai iōlekeu*, about February. It was *hmitōt* (tabu) for a common man to eat the new produce.

#### 24. WEAPONS AND OBJECTS USED IN WARFARE.

The weapons of war were the sling (*tehle*) (Plate XII, 5) spear, (*jo*), club (*jia*), and various axes. A shield (*pete*) was also used. To use the sling was *tha tehle*, the stone was the *weneti*.<sup>2</sup> The *jia* had an end or head made of a hard wood, *mu*, similar to mahogany. The *hnaeō* and *henesewen* were varieties of tomahawks, the former with a long handle, the latter with a handle of moderate length. These had a long beaked head of a bird with an eye in relief, and a kind of hood at the angle or back of the head.<sup>3</sup> (Plate XII, 4.) The *hnaeō* was made sometimes in the shape of "a turtle head" without the hood.<sup>4</sup> Besides the *jo*, there was a smaller spear or javelin (*wanajo*) thrown by help of a loop (*sep*) on the middle finger of the right hand. The bow and arrow were not used in warfare.

#### 25. TRANSPORT. CANOES.

The Lifuans used both single and double canoes, as well as a kind of raft or catamaran (*iwenge*).

The single canoes (*he*) had outriggers (*hnapan*), but I have no description of them in Mr. Sleigh's notes. Macfarlane describes them as "simply the trunks of trees scooped out and sharpened at both ends, with an outrigger tied on with native

<sup>1</sup> Cf. Magic, p. 58.

<sup>2</sup> The New Caledonian sling is figured by Lambert. *Mœurs et Superstitions*, p. 185.

<sup>3</sup> "Quelques-uns de ces casse-têtes sont pareils à ceux de la côte de la Calédonie, qui est en face, faits en forme de pioche, ou ressemblant au bec d'un oiseau de proie." Jouan, *Notice*, p. 371.

<sup>4</sup> These weapons are figured by Turner. *Samoa*, p. 339. *Nineteen Years*, p. 312.

cord made from coconut fibre. The larger ones have a plank sewn to each end by native cord.”<sup>1</sup>

The double canoe (*huilu*) (Plate XIII, 1) was formed by two single canoes fixed together by transverse spars with sinnet (plaited coconut fibre). On these, midway between prow and stern, planks (*inehe*) were laid, on which a house was erected to shelter a hearth and fire for cooking. Each canoe had a mast (*qana*) and a large mat sail (*sinyeu*). Macfarlane describes them as “ lumbering dangerous things ; being tied together by native string, they are neither very secure nor durable : the string rots, and often when out in a high sea the whole thing falls to pieces, leaving the natives to sink or swim.”<sup>2</sup>

The double canoe was steered by a long oar (*iij*) worked in a sinnet net at the stern ; an outrigger was, of course, not required.

No large double canoes were made on Lifu on account of the absence of large trees, but they were obtained from New Caledonia. Rochas stated that the Lifuan canoes were the same as those in New Caledonia.<sup>3</sup> According to Jouan the coast of Lifu is unsuited for navigation.<sup>4</sup> The word for paddle is “ *galu* ” (*Iai galu*, *Nengone xaru*). *Uji* was used for “ oar ” (*Iai wi*, *Nengone xaru*).

## 26. ASTRONOMY.

My information with regard to Lifuan astronomy is very defective, but there is no doubt that some constellations were named. In Mr. Sleigh’s vocabulary the Pleiades are named *La fini koko*, and Orion is *La fini wahnyilehnyil*, in which *fini* is equivalent to “ wreath,”<sup>5</sup> *koko* is the yam, and *wahnyilehnyil* is not explained. In the Bible translation (Job xxxviii, 31, 32), Arcturus is *Uresa*, and the words *Oriona* and *Mazaroth* as in the English are used.

In Nengone *O re Bea* is Arcturus, *O re Tiricekol*, the Pleiades, and in Iai Arcturus is *Uresa*, and the Pleiades are *Kukuinyi* or *Kukuūnyi*, while Orion and Mazzaroth are written *Oriona* and *Mazarothē*.

The morning star is *wētesiji hata lai* ; a meteor or comet *wejiemē*.

## 27. SEASONS. THE CALENDAR.

The year *macate* is reckoned by one season of ripened fruit to another, or by twelve moons. It is divided into seasons, *ite ijin*, or sowings, and the months, *ite teu*, are counted, *sitemu* being the interval of a month. The new moon, *la mama teu*, is an unripe moon, a full moon is a complete or perfect moon.

Definite seasons are : *Hnai hedō* winter, *hnaōn* summer, *sawaza* the time of short days, *drai iōlekeu* the days of bringing in first-fruits to the chief (February), *wenehmite*

<sup>1</sup> *Story of Lifu Mission*, p. 16.

<sup>2</sup> *Loc. cit.*, p. 16.

<sup>3</sup> *Iles Loyalty*, p. 22.

<sup>4</sup> *Notice*, p. 373.

<sup>5</sup> Cf. *ite fini engene sinōe*, garlands, wreaths of flowers, and *finimeciwe*, *finitia*, necklace.

the time of paying the tribute of food to the chief.<sup>1</sup> The following calendar, written by a Lifuan, was sent to me by Rev. J. Hadfield. I have added as far as I can a translation :

January.—*Canalu.* *Ijine ihote keu i anete helepu me ite tixe i*  
 Season of those (who are) inland and (pl.) master of  
*angate. Kola kuca ite itra haze thategai Angajoxu mate hna mieine nyide*  
 them making haze for great chief so that he  
*koi anete Lōsi ngo ite itra koko hi me gutu.*  
 to those of Losi (pl.) yam and fowl.

February.—*Malale.* *Ijine iōlekeu troa pane hamēne la koko koi ite que*  
 Season bring to first give the yam to (pl.) old men  
*mate hane pi la ite thupēte me jajinyi xeni koko.*  
 so that the (pl.) young men and women eat yam.

March.—*Qielu.* *Ijine iōhnyi la lue tefēne. Enganyinyi me enganyinyi*  
 Season meet-at-home the married-couple. and  
*qai Enganyinyi kolojē nge qai Enganyinyi kolopi ejine cate la enyi.*  
 south and north strong the wind.

April.—*Teune Menu.* *Ijine menuēne la nōjei nyipi koko.*  
 Month-of harvest Season harvest the (pl.) new yams.

May.—*Hnaihedō.* *Ijine xome asē la koko qa kuhu hnado ke meci asēh*  
 Winter. Season take all the yam from outside ground for die all  
*dōne la nōjei koko nge ijine meji asē la nōje, ke ijine asē la nōjei xeni.*  
 leaf of the (pl.) yam and season filled all the land season all the (pl.) food.

June.—*Hnaihedō palahi.* *Ke teune sine. Asē la koko qa kuhu hnado.*  
 Winter continues. month of kin End the yam from outside ground.

July.—*Teune qeu.* *Teune nyi qane hmaca troa eēnyi.* *Ijine*  
 Month-of clearing Month-of make beginning again to cultivate. Time  
*do la qēmekene la nōjei ate hnei hnōte ö me lali la ejene.*  
 the face the (pl.) men by

August.—*Teune trohnenyi.* *Ijine troa amē la koko e kuhu hnado.*  
 Month-of dig up ground with stick. Time to the yam out ground

September.—*Jinge ne ithi.* *Kola jinge asē la koko hnado eē.* *Teune jinapa*  
 gather the yam ground Month-of  
*eēnyi.*

October.—*Wenehmite.* *Ijine ikotekeu la itexa lopa.* *Teune thepelu pengōne*  
 Tribute-of-yams Season other villages Month-of  
*mate tro la ite föe i a hane öni me xeni wahnawa me öni i.*  
 the (pl.) women fish bird and eat banana-fruit and fish.

<sup>1</sup> According to P. Lambert, the New Caledonians have two seasons: *iéboua-délat*, hot; *iéboua-tsiam*, cold; or *iéboua-téou*, planting and *iéboua-takaou* clearing. *Maurz*, pp. 56, 58.

November.—*Saurane*. *Ijine amamane la nōjei nyima. Ite nyima ka loi*  
 Season show the (pl.) songs. (Pl.) songs good  
*me ite nyima ka sisi. Ijine nyiate me uesiuesi la ite trahmanyi me*  
 and (pl.) songs bad. Season crack (pl.) men and  
*fōe nge ijine troa ikōtesae la ite thupētesiji.*  
 women and time to run-away-with the (pl.) young-men.

December.—*Satesi*. *Hnaōni. Pengōne kala hape asē he nue triji la koko.*  
 Summer leave alone the yam  
*Ame la nyipi hnaōni te ganuas. Ijine ceia atrunyi la koko inagaje*  
 Then the real summer Time grow large the yam taro  
*me hmētēnē ite fejē asē me nōjei hnite me. Ijine tru la enyi*  
 and banana-clumps (pl.) pull out all and (pl.) bush Time big the wind  
*me qejē.*  
 and high-breakers.

#### 28. MEASUREMENT OF TIME.

The days are counted from "to-day," *la drai celē*. Backward the days are : *eid*, *eidi*, yesterday, *edremitha*, day before yesterday, *edrexōlepat*, the second day before yesterday, *eidehnijē*, four days ago. Forward the days are : *elanyi*, to-morrow, *euj*, day after to-morrow, *cikone*, second day after to-morrow.

The time of day was indicated by names for the several degrees of light, or by naming the position of the sun in the heavens. Noon was described as "the sun when and where we can't look up," or the "falling off of a hat."

The day, *drai*, was thus divided :—

1. *Sine jid*, morning twilight (lit. piece of night).
2. *La kaqa ne lai*, dawn. (*La wēlesiji hata lai*, the morning star.)
3. *Pinyō*, the sun just appearing above the horizon.
4. *La hmakany*, morning. (*Lai e hmakany*, morning light.)
5. *Maca meke jō*, forenoon.
6. *Weliwele hudosī*, forenoon (lit. dry on leaves).
7. *Hnaipa jō*, noon.
8. *Hej*, afternoon.
9. *La heihejī*, evening.
10. *Kolo ha lō la jō*, sun about to set. (*Uke ea i jō*, rays of setting sun.)
11. *Lō hē la jō*, sun gone down.
12. *I kelekele at*, dusk.
13. *Ömōmē hē*, dusk.
14. *Melōhlem*, darkness.
15. *Jid*, night.
16. *La hnengipa jidi*, midnight. (*Xetine meni haō*, densely dark.)

## 29. GEOGRAPHICAL KNOWLEDGE.

The geographical knowledge of the Lifuans was apparently very limited. They were acquainted with the other islands of the Loyalty Group, and with the coast of New Caledonia, but had no knowledge of the islands of the New Hebrides lying to the north. (*Cf.* Folk Tales.) The island of Uvea, i.e., Iai, was called Eathe. The native name of Lifu is Dehu (*d* almost *dr*), the word *Lifu* being the Maré name.

## 30. NATURAL HISTORY.

The only indigenous mammals in Lifu were a small rat or mouse, *aji*, and a species of bat (*Pteropus*) called *thihlē* or *xetiap*.<sup>1</sup> These names are quite distinct from those given in Nengone and Iai. In Nengone the rat is called *xeli*, the bat *adraie*. The Iai names are *tip*, rat, and *bū*, bat.

The pig and dog were introduced and their names are of foreign origin. "Pig" is *puaka* in Lifu and Nengone, *buaka* in Iai. "Dog" is *vailai* or *kuli* in Lifu, *pailai* in Nengone, *kuli* in Iai.<sup>2</sup>

The whale was known to the Lifuans and called *tesimapi*.

A bird, *oni ka sese* (flying animal), was distinguished from animals which walk, *oni ka tro*, and from fishes, *oni i*, but small birds were also called *waco*, from the word *co*, small, and the prefix *wa* denoting something round, compact or fruitlike.<sup>3</sup> Some small creatures have names formed with *nekō*, child, as in the following list.

Some bird names are: dove, *piny*; pigeon, *meketē*; hawk, *huru*; a small hawk, *nekōte hnaeu*; heron, *xela ne gejē*; owl, *meny* or *men*; weaver-bird, *fitiku*; a swallow, *fifikō*, etc.

Reptiles: turtle, *seuen*; snake, *une*.

Fishes: shark, *eōte*; a young shark, *teletele*; a poisonous kind of fish, *hupune ne munuci*; a voracious fish, *use*. Other marine creatures or objects were: sponge, *idrawa*; pearl, *inesala*; octopus, *iutre*; cuttlefish, *menez*; coral, *axōjj*; sea shells generally, *wopalath*.

Insects, etc.: ant, *xejē*; wasp, *mumu*; butterfly, *fenifen*; moth, *nekō i fenifen*; caterpillar, *hapice*; *inyi* (a green variety); a larva which injures clothing, *majahlemu*; fly, *nenge*; blowfly, *nenge teij*; mosquito, *tresit*; gnat, *nekōtuala*; cockroach, *tenyē*; locust, *tit* (destructive), *sipa* (harmless); louse, flea, *ōtē*; *igem* (of body).

Other small creatures: snail, *hapice ne hnīt*, *catei*; spider, *no*, *nonya*; cobweb, *aenge i no*.

Pumice stone "is washed on shore (at Toka) by the sea, and the natives

<sup>1</sup> Hence *ithihlē* with the reciprocal prefix, an umbrella. *Xetiap* means "the close-winged."

<sup>2</sup> Cf. Samoan *pua'a*, Tonga, Rarotonga *puaka*, Maori *poata*, pig; Samoan *uli*, Rarotonga, Maori, Tonga *kuri*, Tahiti *uri*, dog. I do not know the origin of *pailai* or *vailai*.

<sup>3</sup> Cf. *waca*, foot, from *ca*, leg. *wadid*, a button, *wateng*, a bug, *wanasho*, a ball, etc.

formerly thought it was the dung of the whale! It no doubt comes from the volcano at Tanna."<sup>1</sup>

In naming plants many species had distinct names for the leaves, fruit or flower. A leaf generally was *dō* or *dosinōe*, *sinōe* being any tree; a fruit was *wa*<sup>2</sup> or *wene* in composition, and *engene*, a blossom. Some distinctive plant names are as follows:—

Coco-palm, *nu*; a cluster of palms, *inu*<sup>3</sup> or *hnēnge nu*; coconut, *ono*; young nut, *makanu*; very young nut, *wenegete*; old, *ono meci hē*; the cloth-like integument, also the edible core, *pānu*.

Banana: plant, *metrun*; fruit, *wanawa*; bunch of fruit, *iwanawa*<sup>4</sup>; ripe banana, *waithimede*; a sweet kind, *wanamomo*; grated and pressed fruit, *matra*; flower, *sisa*.

Sugar cane: *wia*; leaves, *inangoi*.

Breadfruit: tree, *on*; fruit, *wen'ōn*.

Maize: *watolea*; flower of maize, *sisa*.

Melon: *wanathim*.

Yam: *koko*; small yams growing on larger, *qān*.

### 31. NATURAL PHENOMENA.

The various phenomena of nature receive distinct names, even though of similar character. A large cloud is *ave*; the clouds collectively, *ite iave*; a small cloud, *wanawa*; and the cloudless sky, *ujaac*. Rain generally is *mani*; a gentle shower, *hnemuhnem*, or *teije ne medenge* (lit., weeping of baby).

Lightning is *sameke*; thunder, *hedeng*; a rainbow, *lewen*.

Similar discrimination is applied to other phenomena, e.g., a current in the sea is *thelec*, but a strong current is *qadro*; the sea, *hnagejē* (chiefs', *hnateiseniē*), *gejē* the billows, but the deep sea is *hnahena* or *gajui*, or *hnahede*, the deepest sea; *hok*, a wave.

A wind is *enyi*; a strong wind, *la enyi ka cate*; a hurricane, *wene*; a calm, *haodrai*; waterspout, *uke xōje* (from *uke*, bundle, *xōje*, to cut).

### 32. WINDS. DIRECTION. POINTS OF THE COMPASS.

The names of the winds in Lifu are distinct from the terms used to indicate direction. The north wind is *Dē*, the south *Qeu*, the east *Huja*, and the west *Eik*. In the vocabulary I find *huniemajen* (Wete dialect) and *tengedeixetē* (Losi dialect) for the south-east, but whether for wind or direction is not clear. The words are apparently compounds, but are unexplained. *Hunie* is the Isle of Pines, south-east of Lifu.

<sup>1</sup> G. Turner, *Nineteen Years*, p. 504.

<sup>2</sup> *Dō* and *wa* represent the common Melanesian words *rav* and *vua*, leaf and fruit.

<sup>3</sup> In these words *i* is the reciprocal prefix, as in Fiji *tei*.

The words used for direction are a series of related words which are evidently connected with certain verbs of motion, and particles denoting movement. Thus :—

North : *kolopi* (distant), *ciepi* (near); northward, *calemijē*, *ailopi*, *hepi*.

South : *kolojē* (distant), *ciejē* (near); southward, *calepi*, *ailojē*, *hejē*.

East : *kohiē* (distant), *cahiē* (near); eastward, *cahmiju* (distant), *kohmiju* (near), *ahiē*, *hiē*.

West : *kuē* (distant), — (near); westward, *cahmijē* (distant), *kohmijē* (near), *ahue*, *hue*.

In these words *lopi* means "go outward"; *lojē*, "go inward"; *pi*, out, forth; *jē*, off, up; *ju*, down.

The word for "direction" is *gōtrane*, literally "a part, side, district."

The words given may be used as nouns with a preposition, or as adjectives, e.g., *nōje joxu asē ne calemijē*, the chiefs all of the north; *la knit e calepi*, the forest in the south; *la nōj' e calemijē*, the country in the north; or *la nōje kolopi*, the north country; *angat' a inyike trotro qa kohiē*, they journeyed from the east.

The forms *hepi*, *hejē*, *hiē*, *huē* are apparently verbal; they appear as adverbs, and with the causative prefix *a* and transitive suffix *-ne* as verbs, e.g., *kōnīte a cile meke huē*, three stood facing the west; *gōtrane ahiene*, the side east, side made east.

I find the following compound terms: *ahiē e ailojē*, south-east; *kolojē e kuē*, south-west; *kolopi e kuē*, north-west.

### 33. ARITHMETIC.

There was no simple method of counting or naming high numbers until suitable words were introduced by Europeans.

The numbers from one to twenty were counted on the fingers and toes, each hand commencing with the thumb and each foot beginning with the big toe. The native numerals clearly indicate the method of counting.

The notation is imperfect vigesimal, i.e., a vigesimal system based on the quinary.

The simple numerals from "one" to "four" are: 1, *ca*, *casi*; 2, *lue*; 3, *kōni*; 4, *eke*.<sup>1</sup>

Five is *tripi*, which has no connection with the word for "hand," *ivanakoime*.<sup>2</sup>

The numerals from six to nine are: 6, *cangemen*; 7, *luengemen*; 8, *kōningemen*; 9, *ekengemen*. In these *ca*, *lue*, *kōni*, *eke* are the numerals for 1-4, *nge* is the conjunction "and," and *men* is probably for *imen*, hand. Thus *ca-nge-men*, for *ca-nge-imen*, one and a hand.<sup>3</sup>

<sup>1</sup> The corresponding words in Nengone are: 1, *sa*; 2, *rewe*; 3, *tini*; 4, *ee*. In Iai: 1, *khīca*; 2, *lo*; 3, *kun*; 4, *rak*.

<sup>2</sup> Nengone: 5, *dongo*; hand, *aranise*. Iai: 5, *thabang*; hand, *hayamen*.

<sup>3</sup> Nengone: 6-9, *dongo ne*, followed by the simple numerals 1-4. Iai: 6-9, *thabung ke nua*, followed by simple numerals.

"Ten" is *luepi*, which corresponds to *tripi*, and in which *pi* may be either an abbreviation of *tripi* or the true root. *Lue* is "two."<sup>1</sup>

The numbers from 11 to 14 are: 11, *cako*, *luako*, *kōniko*, *ekako*. These are formed from the numbers 1 to 4 by the suffix *-ko*, which takes the place of *ngemen* in the numbers from 6 to 9. Possibly *ko* may be connected with the preposition *koi*, to or belonging to. A comparison of the words for "fingers" and "toes" shows a somewhat similar use of *ko*. *Ime* is "hand," *ca* "foot," *wana* a fruit. Hence "a finger" is *wana-ko-ime* and "a toe" *wana-ko-ca*, in the plural *i-wana-ko-ime* and *i-wana-ko-ca*, literally a collection of fruits to the hand or foot. Thus *cako* may perhaps be explained as "one belonging to (another hand), a difficulty being the omission of the following noun.<sup>2</sup> The numbers from 11 to 15 may be formed by addition thus: 11, *luepi nge cas*; 12, *uepi nge luete*; 13, *luepi nge kōnīte*; 14, *luepi nge ekete*; 15, *luepi nge tripi*. Fifteen is *kōnipi*, from *kōni*, three, and *pi*. It corresponds to *tripi* and *luepi*.

The numbers from 16 to 19 are formed from 1 to 4 by the addition of *qaikhano*: 16, *cagaikhano*; 17, *lueqaikhano*; 18, *kōnīqaikhano*; 19, *ekeqaikhano*. These are unexplained.<sup>3</sup>

"Twenty" is *ca ate*, literally "one man," "forty," *luate*, two men, and so on, all the intermediate numbers being formed by addition, as, e.g., 24, *ca ate nge ekete*; 50, *luate nge luepi*; 99, *ekeate nge ekeqaikhano*. *Ca handed* is used for 100.<sup>4</sup>

The numerals may be used with the plural signs: *la ite tengē luako*, twelve baskets, and when used of persons, are preceded by *ala*, which is equivalent to the Polynesian *toka* or *to'a*; *la ala luako*, the twelve (persons).<sup>5</sup> In the form of causative verbs with prefix *a* and suffix *n(e)*<sup>6</sup> the numerals take the noun prefix *hna* and then become ordinals: *la hna a luen*, the second; *la hna aluengemenen*, the seventh. "The first" is *la hnapan*.

<sup>1</sup> Nengone: 10, *rewe tubenine* (*tube*, *bundle*, *wanine*, *finger*). Iai: 10, *libenyita* (*li*, two, *be*, *hand*, *ngita*, *our*).

<sup>2</sup> Nengone: 11, *rewe tubenine ne sa re cemene* (*cemene*, overplus); 12-14, by using *rewe*, *tini* or *ece* instead of *sa* in the foregoing phrase. Iai: 11-14, *libenyita ke nua* (*nua*, more), followed by the simple numerals.

<sup>3</sup> Nengone: 15-19, by substituting the expressions for 5-9 for *sa* in those for 11-14. Iai: 15, *libenyita ke nua thabung*; 16-19, by adding the simple numerals 1-4 to the phrase, *libenyita ke thabung ke nua*.

<sup>4</sup> Nengone: 20, *sa re ngome* (one the man); 40, *rewe re ngome*, two men, etc., the intermediate tens by addition of word for ten. Iai: 20, *khōca at*, or *at ae behkōt* (*at*, man; *behkōt*, complete); 40, *lo liat* (*li*, dual prefix); 60, *kun niat* (*ni*, plural prefix). The intermediate tens by adding *ke libenyita metu*.

<sup>5</sup> Nengone: *xara*.

<sup>6</sup> As, e.g., *a-tru-ne*, to make great, from *tru*, great. The causative form is generally used in Melanesian languages to indicate the numeral adverbs once, twice, three times, etc. This use is not found in Lifu, although the numeral, not causative, is used as a verb: e.g., *angaf'a kōni a kuca*, they three do (where *a* is the mark of the present tense), i.e., they do it the third time, or three times. Nengone suffixes *ne* and Iai *n* to form the ordinals.

## 34. RECORDS.

Before the introduction of writing, records were made by tying knots in a string as aids to the memory. Messages were sent by means of these strings from one chief to another, and were usually only communicated to or by the chiefs. In this way was notified the impending death of a chief, or some calamity about to befall a district, the string being knotted by the person projecting the evil. A warning was sent to a friendly district or person in the same way. The number of knots in the string indicated the number of points to be communicated. The name of this knotted string is not recorded. The verb "call to remembrance" is *samejene* or *amezeje*. The word *tusi*, adopted from the Samoan, is now generally used in Lifuan for "book."<sup>1</sup> "To write" is *cinyihany*, and "a writing" *cinyihan*. "To count or read" is *e*, "a reading" *la hna e*.

A covenant (*isisingikeu*), mutual promise or marriage agreement, was recorded by carving (*trainenēz*) on a doorpost in front of the house of one of the parties.

## 35. CURRENCY. MEASURES.

There is no mention of currency in Mr. Sleigh's notes. Codrington states that a braid made of the red fur under the ears of the flying-fox was formerly used in the Loyalty Islands as a medium of exchange.<sup>2</sup>

The only measure of length was the fathom, *knapane*.

## 36. SIGNALS.

A fire was kindled as a signal from one island to another to indicate death or some trouble in time of war. A fire would also be used to show a landing place when a canoe was approaching the shore after dark.

## 37. PERSONAL HYGIENE.

In a poor condition of health the natives often neglected personal cleanliness, and thought washing would induce illness. For an invalid who had spent two years in his house unwashed, Mr. Sleigh prescribed washing as a remedy, with excellent results. The first Lifu primer had a lesson: "Don't go out during public worship to (*nyijē öw*) pick out and eat fleas."

## 38. SICKNESS. MEDICINE. SURGERY.

Asthma and other forms of lung disease are extremely prevalent on Lifu. This may be due partly to the moist climate and partly to the heated and close state of the interior of the native dwellings. Elephantiasis occurs, and syphilitic affections

<sup>1</sup> *Tusi* originally meant the marking or pattern on siapo or native cloth.

<sup>2</sup> *Melanesians*, pp. 324-325.

have seriously affected many of the population. Rochas estimated that at least a third of the people suffered more or less from scrofulous affections.<sup>1</sup>

Mr. Sleigh gives the following list of ailments among the Lifu people.

Fever, <i>Ideuthi la itei.</i>	Blister, <i>kuthony.</i>
Dropsy, <i>thimöl.</i>	Ulcer, sore, <i>piagöt, kumala.</i>
Dysentery, <i>trongi madra.</i>	Palsy, paralytic, <i>ate kagenyi.</i>
Piles, <i>Huli axel.</i>	Creeping sensation, <i>wewē la ite ngongo.</i>
Itch, <i>ixelek.</i>	Numbness, <i>tha idei la itei.</i>
Boils, <i>thewek, kuthony, piagöt.</i>	Deafness, <i>simihnagenyē.</i>
Biliousness or bile, <i>sičenemegot.</i>	Dumb, <i>hum.</i>
Sick sensation, <i>ngom.</i>	Scrofula, <i>piagöt.</i>
Cough, <i>eu.</i>	Consumption, <i>wegeju.</i>
Sunstroke, <i>hma cinajöny.</i>	

Sickness was thought to have been caused either by wrong-doing on the part of the sufferer or by witchcraft practised by some malicious person. In the former case the afflicted person was often interrogated as to what evil he had done. A frequent way of inflicting disease was by imprecation or by various magic rites, such as placing skins of banana fruit or other refuse near the house door of the person who was to be injured.<sup>2</sup> Hence one form of the verb *mec*, to be sick, is *mecijē pi*, to be cursed. One of the native Christian teachers regarded the childlessness of his wife as caused by some such ceremony, and asked Mr. Sleigh whether he might use means to remove the curse. Sickness was also ascribed to a demon, *Kolemija*, seen in dreams. Fits and convulsions were thought to be the result of the influence of an evil spirit.

In medical treatment the sap and juices of plants, and prepared leaves, were largely used, and hence a common name for medicine is *ite drōne sinōe*, or *dōsinōe* (leaves of tree). Sea water is a common and favourite form of medicine. Children with their parents will stand in the sea and drink from a vessel held aloft, pouring

<sup>1</sup> Rochas remarks: "Les naturels des Loyalty paraissent être sujets à peu près aux mêmes maladies que les Calédoniens. J'ai déjà fait connaître que les scrofules sont très communes parmi eux, plus communes que parmi les habitants de la Nouvelle-Calédonie. On y voit aussi quelques goitres, affection que je n'ai jamais vue sur la grande terre. Je rappelle à ce propos quo ces indigènes n'ont pour s'abreuver que le lait de leurs cocos et une eau saumâtre ou calcaire. Comme ils font un véritable abus de l'eau de mer, car ils en prennent à dose purgative et vomitive deux fois par semaine, il ne serait pas impossible que cette vicieuse coutume n'eût une large part au développement des entérites très communes parmi eux. La tuberculisation fait de nombreuses victimes." *Iles Loyalty*, p. 22.

Lambert says: "Comme purgatif, ils usent et abusent de l'eau de la mer. Malades, ils se purgent pour arrêter le mal; en bonne santé, pour le prévenir." *Mœurs et Superstitions*, p. 226.

<sup>2</sup> Cf. Tanna practice of *nuruk* as described by Rev. W. Gray. *Internal Archiv für Ethnogr.*, VII, 1894, p. 234. Also in Fiji. T. Williams, *Fiji and the Fijians*, London, 1884, p. 210.

the water into their mouths. Sea water is frequently taken in calabashes to sick friends inland.

Macfarlane describes the treatment : "For all ordinary ailments sea water is the remedy, and of that they drink a prodigious quantity. In order to make them vomit after drinking it, they use the bark of a certain tree. Covering it over with leaves, they tie it up, and with this they lave the water into their mouths until they have swallowed nearly a bucketful (they declare that they can take two bucketsful!). Then, like distended leeches, they lie or roll on the grass or sand until they vomit, after which they say they are well and feel strong, although it sometimes proves fatal."<sup>1</sup>

Some vegetable styptics are used, and fomentations are made with hot leaves. The body is rubbed with the leaves of the bush *adrath* in order to remove pain.

Diseases were also supposed to be curable by charms.

The natives of Lifu had considerable skill in surgical operations. They have wonderfully trepanned, removing a portion of the skull and replacing it with a piece of coconut shell. Pressure on the brain is frequently relieved by scraping, and thus making thin a part of the skull. Phlebotomy (*xōje la itei*, cutting the body) is extensively practised, often to such an extent as to cause blindness, or, if the patient was a child, very serious injury.

Macfarlane says : "For all pains and bruises they cut with a piece of a glass bottle. A man with a pain in his head would never suppose that it arose from the state of his stomach. He must cut his head at the very place where he feels the pain. They lance for the most trivial things. About two years ago (1871) a native on the south side of Wide Bay had a pain in his neck, was applying the usual remedy, cut his throat, and died. If their children get the least knock they must be lanced. I have known a child to fall, or rather roll off, a board only raised three inches from the ground, on which account the parents felt that they must lance it."<sup>2</sup>

### 39. MUSIC AND DANCES.

One word, *nyima*, is used in Lifu for instrumental and vocal music. A few names and descriptions of musical instruments are found in Mr. Sleigh's vocabulary. The *trutru* is a shell (conch) trumpet. The *itrapē* is made of coconut-palm leaves tightly coiled and held in each hand. When the coils are struck together a dull, thudlike sound is produced, and the instrument is used to keep time in dances. The *hoho* is some kind of wind instrument, pipes (?).

In Nengone the shell trumpet is *cucu*; the equivalent of *itrapē* is *aebe*, and of *hoho*, *guckon*. In Iai the shell trumpet is *trutru*, the *itrapē* is called *buiybet*, and the pipes *utkōwi*. I have no mention in the vocabularies of a drum, except in Iai, where the word used, *pate*, suggests an introduction from Samoa. The Samoan *pate* is a small wooden drum carried on the arm, and was introduced there from Tahiti.

<sup>1</sup> *Story of Lifu Mission*, p. 14.

<sup>2</sup> *Op. cit.*, pp. 14-15.

The dances, *fia* (with shouting, *cuecue*), of the Lifnans appear to have consisted of organized movements or drill, and mock combats. Rochas gives the following description :—

" La danse est pour eux comme pour les voisins un véritable passion. Je n'abuserai pas de la patience du lecteur jusqu'à lui représenter pour la seconde fois ces scènes barbares et burlesques où une troupe de sauvages nus s'agitent avec une sorte de frénésie autour d'un feu de joie. Ces exécutions choraliques, quoique susceptibles de nombreuses variétés suivant les localités et suivant le caprice du moment, ont toutes un air de famille qui les rapproche singulièrement. Ces danses qui trahissent parfois les instincts de la lubricité, revêtent en d'autres circonstances un caractère guerrier et féroce. Ici comme en Nouvelle-Calédonie, les femmes n'y sont point admises ; elles font leurs danses à part et souvent avec un licence qui égale tout ce qu'on produisait jamais en ce genre dans les mystères de la bonne déesse."<sup>1</sup>

Macfarlane gives the following details of a dance witnessed by himself :—

" The parade was about nine miles inland, a beautiful plain about 700 yards long and 150 broad, covered with grass, and surrounded by a few large shady trees and low bush. When I arrived preparations were being made for the feast ; some were dressing and painting for the dance ; the singers were away in the bush practising for their performance. I was received kindly by the king, who politely performed the part of a host. He conducted me to his house, gave me some sugar-cane and then led me round the numerous and immense piles of yams, allotting me my portion as his guest.

" I took my position under one of the large shady trees. A great number of spectators were present from all parts of the island, who stood round the parade. The centre was cleared, and all eyes were directed toward the farthest end of the plain. There was a kind of breathless expectation when out rushed two men from the bush and ran towards us with all their might. They had each a spear and looked terribly excited. Their faces were painted black as ebony, and their eyes looked as though they would leap from their sockets. They ran about forty yards, then stopped suddenly and shook their spears at us, and threw grass and dirt into the air in the most defiant manner ; they then ran back, but before they got to their places two others rushed out and went through the same gesticulations. This was continued until the company drew near, which during the whole time were slowly approaching. On they came slowly and orderly, each with some food in his or her hand, and singing as they advanced. When they arrived at the centre of the plain, they formed a circle, and continued walking round, circle within circle, until all had come up and were moving round. They then laid the food in a heap and retired. The heralds<sup>2</sup> soon appeared. This body is composed of young, strong, active men who can run

<sup>1</sup> *Iles Loyalty*, p. 25.

<sup>2</sup> In Dan. iii, 4, " herald " is translated *ta aie cainjen*, from *cainje*, to proclaim, preach.

and manoeuvre well. On this occasion they were conducting a square of natives about ten deep, closely packed. The outside lines of the square were composed of the tallest men, who were not painted nor in any way decorated ; they kept so closely together, and moved so slowly, as to make it impossible to see their centre. The heralds, as before, ran out by *teos*, calling out the names of their fathers and chiefs.<sup>1</sup> When the square was opposite where we sat they stood still for a few minutes, then two or three of the heralds standing at a distance ran towards them furiously, apparently in a state of the greatest excitement ; when they came close to the centre of the front line, they raised their clubs as if to cleave the skulls of those before them, upon which the front line suddenly parted in the centre and a scene burst upon our view which I shall never forget. It was so remarkable, so unexpected, and so sudden, and it was accompanied by a shout of admiration from the spectators which resounded far and wide. There stood a square of women about ten deep, their faces painted jet black and shining as though they had been French polished, their persons decorated with flowers, shells, and ornaments ; each held in her hand a kind of bouquet made from a fibrous root, snowy white, and there they stood like statues, erect and still, in lines perfectly straight. The only perceptible motion was that of the forefinger, by constantly moving which they kept the fibres of their bouquets perpetually trembling. When the applause had ceased among the spectators a female voice was heard from the midst of the square. At first it was very low, but it warbled higher and higher until it reached the highest pitch, when all the others suddenly joined in and as suddenly stopped again. This was continued for a little while, when all at once the back lines commenced stamping with one foot, and the front line fell off in a dance, which consisted in a number of movements and turnings not at all remarkable for their gracefulness. The stamping quickened and strengthened until the ground shook beneath us. Numbers from the crowd threw presents of native property to the dancers, and when the singing and stamping had become very loud and quick, and the dancers had wrought themselves up to a state of great excitement, the whole was suddenly brought to a close by a great shout. The singing then commenced as before, then the stamping, then the second line came forward as dancers, and so they continued for about an hour, after which all retired.

" After a short interval the heralds appeared again, announcing the approach of a second body. These were surrounded by tall men like the others, who parted as before, revealing a square of men sitting, each with a small drum in his hand. Singing commenced as with the women, all joining in the chorus. After a short time they commenced beating with their drums, upon which the fore line broke off in a dance ; it was much like that of the women and terminated in a similar way. It was now near sunset. The company formed themselves into dancing parties of about fifty in each group, and commenced the common native dance : this I knew was likely to last through the night, accompanied by all kinds of wickedness."<sup>2</sup>

<sup>1</sup> Cf. Exclamations, No. 65 *infra*.

<sup>2</sup> *Story of Lifu Mission*, pp. 8-11.

This was the last heathen feast on Lifu; a number of the natives having embraced Christianity, the remainder were never strong enough to get up a similar feast.<sup>1</sup>

A description of a mock combat is given by Rochas: "Outre les danses, les simulacres de combat font les délices des indigènes. Deux partis ennemis s'envoient réciproquement une grève de lances innocentes, c'est-à-dire de morceaux de bois légers et émoussés aux extrémités que chacun a à cœur d'éviter, ce qui nécessite des prodiges de gymnastique et d'adresse; les partis chargent et battent en retraite alternativement, puis enfin se mêlent, s'entre-choquent jusqu'à ce que la victoire se décide d'un côté ou que, la fatigue terrassant à la fois l'un et l'autre parti, le combat finisse faute de combattants. Ces exercices forcés, qui ne sont pas moins à la mode aux Loyalty qu'en Nouvelle-Calédonie, et après lesquels on se conche imprudemment sur le sol, au grand air, nu et ruisselant de sueur, ne sont point étrangers au développement des maladies qui affligent ces populations."<sup>2</sup>

#### 40. SALUTATIONS.

There seems in early times to have been no very definite form of salutation except the question on meeting: Whither goest thou? The actual words varied according to the rank of the person addressed as, e.g., to a chief: *Jötöti cilieti iē?*—to a superior: *Tro nyipo iē?* or *Tro nyipiti iē?*<sup>3</sup>—to an equal: *Tro eō iē?* Now the Samoan expression *Talofa!* has been introduced and is very generally used. The French *bon soir!* is also used in meeting and bidding farewell, but without reference to the time of day. In the latter case words are used expressing longer or shorter time of absence, definite or indefinite, or final parting.

#### 41. VARIOUS SOCIAL CUSTOMS.

1. THE ENEHMU.—"On Lifu it is customary to select from amongst strangers single special friends, with whom they are connected by mutual good offices. These are called *enehmu*s. The *enehmu* feels bound to provide food and lodging for his friend when he visits him, and will assist him in any way he can, when he needs it, and in return expects the same good treatment when occasion offers."<sup>4</sup> Pao, a Rarotongan, the first missionary from Maré to Lifu, was *enehmu* to Bula the chief.

2. HOSPITALITY.—The natives are given to hospitality (*isaheji*, to show hospitality; *hōna*, a guest), and presents of food play an important part in all ceremonies. Messrs. Drummond and Harbutt give the following account of a presentation in 1857. "Shortly after we reached the teacher's house, the people of Wetch (i.e., Wete) approached, walking in regular procession and each carrying

<sup>1</sup> Macfarlane, *op. cit.*, p. 12.

<sup>2</sup> *Iles Loyalty*, p. 25.

<sup>3</sup> Note that *nyipo* and *nyipiti* are dual pronouns, a person of rank being accompanied or supposed to be accompanied by an attendant.

<sup>4</sup> Macfarlane, *Story of Lifu Mission*, p. 27.

a yam or fish. They marched first in single file, and formed a circle round the teacher's land, lessening the interior space as they gathered in until they were four or five men deep; they then laid down their yams and fish in order, which made one large heap. They then retired, and made room for the people of Ipahne, where we then were. These approached with their fish and yams in the same regular order, and laid them down in another great heap. They made no speech, as is the custom on such an occasion in Samoa, but quietly retired and sat down a short distance off.”<sup>1</sup>

3. DRINKING.—“These natives, as well as those of the Isle of Pines, have a peculiar mode of drinking which appears awkward to a European; they throw the head back, with the mouth open, hold the calabash up with both hands, and allow the water to run down the gullet; this is done to prevent the vessel touching their lips, as it would be considered unpolite for several persons to drink out of the same calabash. They sometimes roll up a long leaf in the form of a tube, insert one end into the calabash, and drink out of the other; when this plan is adopted the leaf is always changed when passed to a stranger.”<sup>2</sup>

#### 42. FOLK-TALES.

So far as I know, no collections of folk-tales have been made in the native languages of the Loyalty Islands. Mr. Sleigh had none, and all that have been recorded are found in an English version in the Rev. S. Macfarlane's *Story of Lifu Mission*. These I transcribe here.

##### 1. *The Finding of the Loyalty Islands.*

“A noted old warrior ascended a high rock with a long fishing-line and large hook. He threw out his line to the west and hauled up the island of Uvea, the supposed direction of his line having ever since been the route to that island, and canoes generally start from the point where he is said to have stood, although sometimes they have to go many miles out of their true course to get to it. The old fellow threw his line out to the south, and drew up New Caledonia. He then threw out his line again to the east and hauled up Maré. He tried northward, but his line broke; so that they knew nothing of the existence of the New Hebrides group, until made known to them by foreigners.”<sup>3</sup>

##### 2. *The Origin of Yams and Death.*

“The natives have no idea of the origin of the first man: they only know that his name was Waleliumemē;<sup>4</sup> that he had a wife and sons, and that he lived in peace and plenty. At that time there was not any sickness or death, and it was not

<sup>1</sup> *Samoa Reporter*, October, 1857.

<sup>2</sup> *Story of Lifu Mission*, p. 20.

<sup>3</sup> Cheyne, *Description*, p. 16.

<sup>4</sup> For his origin, cf. No. 7.

necessary to work in plantations, because the food grew spontaneously and in abundance. It appears that the sons of old Walelimemē had the power of changing themselves into birds, beasts and reptiles at pleasure.

"On one occasion the eldest son, in the form of a rat, went on an exploring expedition, boring his way through the earth until he came to the residence of an old man, the chief of the lower regions. This old chief lived upon yams, of which there were not any at that time on Lifu. The Lifuan observed that the old man kept the yams for himself, and offered him other food; he asked to taste the yams, but was told that they were for the old chief alone, and that to take them would cost him his life. The son of Walelimemē, however, did not believe this, and, watching his opportunity, picked up a yam, and made for the surface of the earth again. On his way he tasted the yam and found it very good; on his arrival at home, he called one of his brothers and told him all; this brother tasted the yam and expressed his delight at the discovery of such excellent food.

"They then went to their father, who with the whole family tasted and were all equally pleased at the new discovery. It was then arranged that all the sons should go in a body and steal a quantity of yams from the old chief below and plant them on Lifu, in order that they too might live on this superior food. They did so, but were discovered before they could get away. The old chief was angry with them, and told them that as they had taken his yams, he would henceforth live upon human flesh. Death should reign on Lifu in order to supply him with food.

"It was then that people began to die, as the Lifuans supposed, to supply the old chief with human flesh in exchange for his yams; and to this day, some of the old men believe that there are more deaths when there is a good yam harvest, the old chief requiring the bodies of men in proportion to the quantity of yams that they obtain. It was then that labour commenced, for having begun planting yams they found it necessary to cultivate every other article of food; nothing would grow spontaneously as before, but weeds.

"Thus yams, their principal and much-liked food, were introduced, but with them came labour and death. It is not unlikely that the fact (according to tradition) of the old chief living on human flesh may have created a desire in them to taste this food also."<sup>1</sup>

### 3. *The Story of Nol.*

"An old man named Nol made a canoe inland; the natives laughed at him for making it so far from the sea, declaring that they would not help him to drag it to the coast; but he told them that it would not be necessary, for the sea would come to it. When it was finished the rain fell in torrents and flooded the island, drowning everybody. Nol's canoe was lifted by the waters and borne along by a current; it struck a high rock which was still out of the water, and split it in two.

<sup>1</sup> *Story of Lifu Mission*, pp. 17–19. Cf. similar stories of theft in Samoan Folk-tales.

(These two rocks are still pointed out by the natives : they form the heads of a fine bay on the north side of the island.) The water then rushed into the sea and left Lifu 'high and dry.'

"This tradition may have reference to the time when Lifu, after the first lift, was a lagoon island like what the island of Uvea is now. If so, it shows that this island has been inhabited for a very long time."<sup>1</sup>

#### 4. *The Idha.*

"Their forefathers assembled at a place to build, or rather erect, a scaffolding which should reach to the clouds. They had no idea of works in stone, hence their 'tower of Babel' was raised by tying stick to stick with native vines. They laboured on undaunted by the sad consequences of the discovery and stealing of yams underground ; perhaps they anticipated a more agreeable issue to their explorations in the heavens. But, alas, for human expectations ! before the top touched the clouds, the ground-posts became rotten, and the whole affair came down with a crash."<sup>2</sup>

#### 5. *Ulauleti.*

"An old man had a number of sons, and he loved the youngest much more than the others, which caused great jealousy, leading them to hate their youngest brother, and ultimately to seek his destruction. They all agreed to make a large hole in which to cultivate an immense yam ; into this the younger brother was tumbled whilst at work, and covered in with soil, and the yam planted on the top of him. When harvest time came they went to dig out this large yam, when, to their astonishment, they found him clinging to the end of it, crying out. 'Take care of this yam for my father.'

"They then resolved to drown him ; so they put him into a fishing basket, weighted it, and lowered him down to the bottom of the sea. A month afterwards they went to take up the basket to get the fish, when lo, and behold, he was hanging to the bottom of it crying, 'Take care of these fish for my father,' so that he, like many things disliked in the world, was allowed to live because he could not be killed."<sup>3</sup>

#### 6. *The Origin of Fire.*

According to Mr. Sleigh, there was a tradition that a woman swam to a great distance and procured fire from another island.

<sup>1</sup> *Story of Lifu Mission*, p. 19. Cf. The story of Qat's departure. Codrington, *Melanesians*, p. 166.

<sup>2</sup> *Story of Lifu Mission*, pp. 19–20.

<sup>3</sup> *Story of Lifu Mission*, pp. 20–21. The theme of this story is found elsewhere in Melanesia. Cf. one story of Qat in Codrington's *Melanesians* (p. 159), of Warshunuka in Iven's "Folk-tales from Ul-wa," Solomon Is. (*Zeitschrift f. Kolonial-sprachen*, II, 1911–12, pp. 138–143), and of Pakomani in Mono, Bougainville Straits, recorded by G. C. Wheeler (*Le Maître Phonétique*, 1912 pp. 12–14).

### 7. *The Origin of Man.*

"Laulaati is the name of their creator, who they suppose made a stone, out of which came the first man and woman."<sup>1</sup>

It should be noted here that some of these stories were probably recorded by Rev. D. Macfarlane because of their similarity to Bible stories.<sup>2</sup> Referring to them, he says: "These traditions had their weight in leading the people to embrace Christianity. When the teachers arrived, they listened to the story of the Fall, and said, 'Yes, this is no doubt true, it is very much like what our fathers told us. They ate the forbidden yam, and death came among us, and we had all to work to provide food.' Noah's Ark was Nol's canoe; and the Tower of Babel was the ancient 'ija' or scaffolding. The account of the Creation was simply the act of their venerable fisherman who drew the islands from the sea. And they saw in the beloved Joseph the petted 'Ulauléti' who could not be destroyed."<sup>3</sup>

### 43. KINSHIP.

The Lifu terms of kinship are numerous and complex. In addition to words denoting blood and marriage kinship there are terms used only when speaking to or of a chief, and also special words used of female relatives with children. The following terms have been recorded, but the subject requires further study.

The word for a "family," *lapa*, is synonymous with that for "village,"<sup>4</sup> but *lapa ka cahae*, in which *cahæ* is a word denoting "kin," is also used. *Cahae* is also used alone: *la cahae me eō*, thy kinsfolk, the kin with thee. Members of the same family are *ite tenekō*, perhaps equivalent to *ite tene nekō*, "those having children." The usual word for a relative is *sine*, meaning "a part," i.e., of the related persons.<sup>5</sup>

#### *Blood Relationships.*

1. *La ite xōłapan*, ancestors. From *xōłe*, a row or company of persons, and *pone*, first. A far distant generation is *xōłe trapaijema*.
2. *Qāqđ*, grandparent.
3. *Keme*, father.<sup>6</sup> Also used for the father's brother, sometimes with the word *kete*, "other," prefixed.
4. *Tetetro*, *tetetroti*, used when speaking to or of a chief, instead of *keme*.
5. *Kākā!* my father! Used when addressing one's own father. When addressed to the father's brother it is pronounced *kūkū*.<sup>7</sup>

<sup>1</sup> Erskine, *Journal*, p. 309, quoting *Samoan Reporter*, 1845. The mother of Qat, in the Banks Islands, was Qatgoro or Iro Ul, a stone that burst asunder. Cf. Codrington, *Melanesians*, p. 156.

<sup>2</sup> *Story of Lifu Mission*, p. 21. <sup>3</sup> So also the missionaries in New Caledonia.

<sup>4</sup> *Lapa*, as a verb, means "to dwell."

<sup>5</sup> *Sineny*, my friend, i.e., a part of me, *sine gō zen*, a bit of food. Cf. Mota *vere*, a division or marriage purposes, also verb "to divide."

<sup>6</sup> *Keme* represents the common Oceanic word *tama*.

<sup>7</sup> *Kākā* is found in other languages as *tata*.

6. *Kakati, tetetroti fe*, used instead of *kākā* when addressing one's own father who is a chief.

7. *Thine, mother.*<sup>1</sup>

8. *Teifeniš*, mother, when speaking to or of chiefs.

9. *Nen̄!* my mother! Used when addressing one's own mother. The pronoun "thou" in addressing one's own mother is "*capo*" or "*calo*."

10. *Neko*, child.<sup>2</sup> When necessary the sex is indicated by the words *trahmany* or *jajiny*<sup>3</sup> following: *nekō trahmany*, son; *nekō jajiny*, a daughter (unmarried). Young children are *nekōnate*, little people. Age is indicated by the words *pane*, first; *haetra*, elder; or *cipa*, younger. The two last words may be used alone: *Nekō i nyidē haetra*, or *pane nekō i nyidō*, his first-born; *nekō i nyidō cipa*, his youngest child. Also *la haetra*, the first-born; *la cipa*, the younger.<sup>4</sup>

11. *Hupuna, hupunaniti*, son, when speaking to or of a chief.

12. *Api*, a grandchild.

13. *Matra*, posterity, descendants.

14. *Mama*, man's elder brother, woman's elder sister.

15. *Jin*, man's younger brother, woman's younger sister.

16. *Tejin*, man's brother, woman's sister.<sup>5</sup> Plural, *ange tejin*, or *ite tejin*.

17. *Xa*, man's sister, woman's brother. Plural, *ite xa*.

18. *Mathine*, mother's brother.<sup>6</sup> Apparently a compound of *mē*, with, and *thine*, mother. Cf. *ano*.

19. *Mimi*, mother's brother,<sup>7</sup> or sister, father's sister.

20. *Ano*, sister's child, mother's brother,<sup>8</sup> brother's daughter. If both persons are named together the phrase is *luete manone*, two with (the relation of) *ano*.

21. *Utha*, brother's child, sister's child, child of father's sister or brother, child of mother's sister or brother.

22. *Temie*, a first cousin.<sup>9</sup>

#### *Marriage Relationships.*

A married couple is *luete fin*, in the chiefs' language *luete nacina*. To become related by marriage is *a luete me tesi*.

1. *Fōe*, husband or wife.<sup>10</sup>

2. *Hmenueti*, husband or wife, used when speaking to or of chiefs.

3. *Tesi*, wife's or husband's father, mother, brother or sister.

<sup>1</sup> The common Melanesian *tina*.

<sup>2</sup> The common Melanesian word *natu*.

<sup>3</sup> The common *tarine*.

<sup>4</sup> The word *kuku* is also used for child.

<sup>5</sup> *Tejin*. Cf. the common Melanesian *tasi*.

<sup>6</sup> I cannot elucidate the difference in the use of these words. But cf. *Mathine* and *kmimi* in the Iri and Nengone lists.

<sup>7</sup> I have no explanation of this word.

<sup>8</sup> *Fōe* is the common word *sos* or *hoa*, used in the sense of companion, wife, friend, elsewhere in Melanesia.

4. *Ie*, sister's husband or brother's wife. *La foē ne la za i kete at*, i.e., the *foē* of the *za* of anyone.

*Female Relatives with Children.*

1. *Ifenōko, ifekuku*, wife and child.
2. *Ifējoxu*, wife and child. In speaking to or of a chief.
3. *Ifetize*, a woman's elder sister with a child.
4. *Ifējin*, a woman's sister with a child.
5. *Ifaxa*, a man's sister with a child.
6. *Ifapi*, a daughter with child or children.

These words are compounds consisting of the plural (or rather reciprocal) prefix *i*, the word *foē*, here used in its true sense of "companion" (*cf.* also the preposition *fe*, "with"), and the words *nekō* or *kuku*, child; *joxu*, chief; *tize*, master; *jin*, *za*, sister; and *api*, grandchild. A person with children is styled *ate kē nekōn*. A married woman is always addressed as *nyipo*, you two.

KINSHIP NAMES IN LAI (UVEA ISLAND).

*Blood Relationships.*

1. *Kiben*, grandfather; *kiben*, *somaca*, grandmother. Used in the plural *lakiben* for "forefathers." *Somaca* means "old woman."

2. *Buba!* my grandfather! *Buba somaca!* my grandmother! Used in address.

3. *Kamen*, father.<sup>1</sup>

4. *Cica!* father! Used in address to one's own father.

*Kamen* and *cica* are also used for the father's brother and mother's brother, with the proper name following. *Cica Toma!* Uncle Tom.

5. *Hinyen*, mother.<sup>2</sup>

6. *Bai!* my mother! Used in addressing one's own mother.

*Hinyen* and *bai* are used with the proper name, for the mother's sister, and father's brother's wife.

7. *Nokon*, son; *nokon in* or *nokon hlu*, daughter (*in*, *hlu*, girl); *lakon*, sons.<sup>3</sup> *Nokon* is also used for brother's son, and for the son of the father or mother's brother. Age is indicated by *atō* and *wakeiat*: *nokon a atō*, his elder son; *wakeiat* or *nokon a wakeiat*, the youngest son.

8. *Öbiny*, grandchild.<sup>4</sup>

9. *Kein*, a man's younger brother, a woman's younger sister. *Tuhan*, a man's elder brother, a woman's elder sister.

10. *Manyin*, a man's sister, a woman's brother.

11. *Mahinyen*, mother's brother.<sup>5</sup>

12. *Nakauny*, sister's child.

<sup>1</sup> Cf. Lifu, *kem*.

<sup>2</sup> Cf. Lifu, *thine*.

<sup>3</sup> Cf. Lifu, *neko*.

<sup>4</sup> Cf. Lifu, *api*.

<sup>5</sup> Cf. Lifu, *mathine*. Both Lifu and Lai have this word formed from the word for "mother" by the prefix *ma*; which seems to be the preposition "with" in both languages *me*.

13. *Tehiny*, father's sister.
14. *Engē!* my father's sister! Used in addressing her.
15. *Haniny*, daughter of father's or mother's brother.

*Marriage Relationships.*

1. *Aīān*, husband or wife.
  2. *Ōngān*, wife's father or mother, husband's father or mother, son's wife, daughter's husband.
  3. *Ūen*, wife's brother.
  4. *Katon*, wife's sister.
- The final *n* or *ny* in the Iai names is the possessive pronoun " his " or " her."

KINSHIP NAMES IN NENGONE.

*Blood Relationships.*

1. *Yejeocene*, forefathers.
2. *Papa*, grandparent.
3. *Cecene*, father. Used also of father's brother.
4. *Cecewaiene*, father, when speaking to or of a chief.
5. *Caca, cicango!* my father! In addressing one's own father.
6. *Hmaien*, mother.
7. *Kodaruieni*, mother. When speaking to or of a chief.
8. *Nene!* mother! When addressing one's own mother.
9. *Tenene*, child. The sex is indicated by *aicahman*, or *ceneue*: *tenego me aicahman*, my son; *tenego me ceneue*, my daughter. Age is indicated by *toke* or *cele*: *o re tok*, the elder; *o re cel*, the younger.
10. *Tei*, child. Used instead of *tenene*, when speaking to or of a chief.
11. *Abuaiene*, grandchild.
12. *Mama*, man's elder brother, woman's elder sister.
13. *Celuaiene*, man's younger brother, woman's younger sister.
14. *Isingene*, man's sister, woman's brother.
15. *Hmimi*, mother's brother.<sup>1</sup>
16. *Anuene*, sister's son.<sup>2</sup>

*Marriage Relationships.*

1. *Cahmanieni*, husband.<sup>3</sup>
2. *Hmenue*, wife.<sup>4</sup>
3. *Cekini*, wife's father or mother, husband's father or mother, son's wife, daughter's husband.
4. *Engene*, woman's son's wife.

<sup>1</sup> Cf. Lifu, *mimi*.

<sup>2</sup> Cf. Lifu, *trahmanyi*, male.

<sup>3</sup> Cf. Lifu, *ano*.

<sup>4</sup> Cf. Lifu, *kmennuti*, wife.

## KINSHIP NAMES IN UVEA.

For comparison I give here the terms for kin in Uvea, the northern portion of the island of Halgan, from which the whole island is generally known as Uvea. The terms are taken from a MS. vocabulary by Bishop Hilarion Fraysse, Vicar Apostolic of New Caledonia, a copy of which I owe to the kindness of the Ven. Archdeacon H. W. Williams, of New Zealand.

*Blood Relationships.*

1. *Pupa*, great-grandfather. This is apparently the Iai term *buba*, used in the vocative for grandfather.

*Otea pupa i tako*, ancestors (ancient times, *i tako*).

2. *Enge*, grandfather. This is also given for father's sister, and in this last sense is the same as the Iai *enge*. Cf. also Nengone, *engene*.
3. *Mihimihi*, mother's father. Cf. Lifu, *mimi*.
4. *Tamana*, father. Common Polynesian, *tama*, without suffix.
5. *Tinana*, mother. Common Polynesian, *tina*, without suffix.
6. *Nene*, mother, mother's sister. Cf. Nengone, *nene*.
7. *Uli*, offspring, family.
8. *Tama*, child, son. Common Polynesian, *tama*.
9. *Tamahine*, daughter. Common Polynesian, *tamafine*, etc.
10. *Muma*, elder brother. Cf. Lifu, *mama*.
11. *Moma*, elder sister. Cf. Lifu, *mama*.
12. *Kave*, sister.
13. *Iene*, cousin.

*Marriage Relationships.*

1. *Ava*, husband, wife. This is the common Polynesian word (Samoan, *ava*), but it is used in Uvea with the Melanesian suffixes: *ava-ku*, my husband (or wife); *ava-na*, his wife or her husband.
2. *Taukatou*, husband's brother, husband's sister. Cf. Samoan, *tau*, family connections.
3. *Tauamaha*, wife's brother, wife's sister.
4. *Katou*, husband's father, husband's mother, wife of woman's son, husband of woman's daughter.
5. *Funonga*, wife's father, wife's mother, wife of man's son, husband of man's daughter.
6. The word *hoa*, with which, cf. Lifu, *fōe* is used in Uvea only for companion, friend.

## 44. BIRTH. CHILDHOOD.

An account of the childbirth customs of the Loyalty Islands by Niki Vaine,<sup>1</sup> the wife of a Mangaian teacher who laboured on Lifu, was communicated to the *Journal of the Anthropological Institute* in 1890 by the Rev. W. Wyatt Gill. The following is the essential part of this account: "When a woman knows that her time is near, she selects a place in the bush for the event to come off, carefully weeds it, and prepares a hollow for her greater convenience. The spot selected is always near the sea, for the purpose of ablution. As soon as labour commences she goes to this place." According to Niki Vaine's account, the birth (*la hnaho*) takes place *coram publico*, only the husband being absent. "When the child is born, a woman divides the umbilical cord with a shell, picked up for the purpose on the beach. The infant is then placed on a banana leaf, not washed or even wiped, nor is anything wrapped round it. A woman now chews finely a piece of coconut and thrusts it down the little throat with her finger, far enough to occasion retching. This is done twice, the reason assigned for this custom being that "it enlarges the throat so as to facilitate swallowing food." Meanwhile the mother has gone to bathe in the sea, carefully taking with her the placenta, etc., in a coconut-leaf basket. After thoroughly bathing and drinking some sea-water as medicine, she does not return to her own home, i.e., to her husband's dwelling, but lives on the beach in a little temporary hut, thatched with coconut leaflets. There mother and babe remain until the child is big enough to crawl. She spends her time in sleeping by the log fire inside the hut, and bathing in the sea. It is no uncommon thing for the infant to be scorched, as it is placed very near the fire to keep its little nude body warm.

"The husband never comes to see his wife during the months spent by her on the beach; but occasionally he sends her a basket of food. Her mother, or some other female relative, looks after her wants.

"On an appointed day she takes up her child and returns home to her husband. When she gets near the dwelling, her husband calls out to her to come in and bring the child. Should he not say 'Come, come,' it would be plain that he did not want her any more."<sup>2</sup>

From Mr. Sleigh I had only the following notes:

For some considerable time after the birth of a child the mother was regarded as *hmitôte* (tabu), and was required to live a secluded life. During this period her husband did not cohabit with her.

Infanticide does not seem to have been practised, though a puny or weak infant was regarded as a *nekō ka ngazo*, or bad child.

The name (*ōjen*, chiefs' *atesica*, *atesin'ti*) of the child was agreed upon (*ati*) by the parents and other relatives, the son (especially of a great chief) usually taking

<sup>1</sup> In an address to a gathering of married women at Mangaia, Hervey Group. Notes were taken by Mrs. Wyatt Gill.

<sup>2</sup> *Jour. Anthropol. Institute*, xix, 1890, pp. 503–505.

his father's name, though sometimes children were named after the mother's relations. Circumcision was not practised in Lifu.<sup>1</sup>

The adoption of a child sometimes took place, but this custom was not indigenous, and was first suggested by Samoans. It was discouraged by the missionaries, as it was often reckless and injurious to the child. There is no native term for the practice, and the phrase used is *troanyi kukun*, to be made a child; *la ate hna nyi kukun*, an adopted person. Children were often suckled for a period of two years or longer, chiefly in the hope of delaying pregnancy.

#### 45. PUBERTY.

On attaining the age of puberty a young man (*fekene thupetesij*) was required to eat animal food (*gōni*) for a year, after which he must on no account touch the body of his married sister (*ifazu*) or sit near her, or partake together with her the expressed juice of scraped coconuts. A maiden sister (*jajiny*) was not so *hmitōte*. "Promiscuous intercourse before marriage was allowed."<sup>2</sup>

Mr. Sleigh had no knowledge of any ceremonies connected with the attainment of puberty.

An adult male or female is described as *hmoe*.

#### 46. MARRIAGE.

There was no division of the people for marriage purposes as in the islands of Melanesia northward, and there were no restrictions as to whom a man might marry, except near kinship. Marriages between cousins (first and second) were prohibited. A chief would sometimes order a young man to marry a woman, often one whom he, the chief, had violated. A young man meeting or walking alone with and speaking to an unmarried or espoused girl might be clubbed by her father or other guardian. Hence marriages were arranged by friends of the parties concerned, and bride (*tepu*) and bridegroom (*ixōtesai*) were frequently entire strangers to each other. A man gave property to the woman's father in order to obtain her as a wife. The giving of this was called *ifetesni*, and the property given was *agūt*. A present given to induce a woman to marry was called *june hmala* (*june*, wages, *hmala*, to betroth).

Before cohabitation the woman espoused was taken by the man to live in the house of one of his friends. This may be a survival of marriage by capture, which is indicated by the old word for bridegroom, *la ate xōtei ikōlesai*, literally "the man (who) first (*xōtei*) runs with (*i*, reciprocal prefix, *kōte*, to run) a woman."

The first settlement of the newly married couple in their own home was called *iathi uma*, perhaps from *iathi*, to strike, with the reciprocal *i*, and the word *uma*, house. Another name for this was *joi uma*.

<sup>1</sup> New Caledonians slit the prepuce.

<sup>2</sup> Cheyne, *Description*, p. 15.

The missionaries introduced from Samoa the word *faipoipo* for marriage. This had been adopted in Samoa from the Tahitian *faaipoipo*.<sup>1</sup>

A man was not allowed to sit with his married sister, or even to speak of, or to her. One form of bad language was to speak of a sister.

There was no cohabitation of married couples during menstruation and pregnancy, and for a considerable period after childbirth.

A married woman was respectfully addressed as "you two," with the dual pronoun, and there were special terms for married female relatives. (*Cf. Kinship.*)

Polygamy was commonly practised. A common man might have several wives; a chief often had many, as the number of wives was regarded as adding to a man's position and influence among his people. No cases of polyandry were known to Mr. Sleigh.

#### 47. WIDOWS.

The widow (*sine fœ*)<sup>2</sup> of a common man returned to, and lived with, her own relatives, and might re-marry; but the widow of a great chief was required to remain unmarried. Since the introduction of Christianity, however, the re-marriage of a chief's widow has often taken place, but the new husband is not thereby raised to the rank of his wife, who retains the rank of her first husband.

#### 48. DEATH.

Death, like sickness, was usually ascribed to ill will on the part of an enemy. "The death of a chief, although he had lived to be a hundred years, was always attributed to sorcery, and when dead they would stuff his eyes, ears, nostrils and mouth full of leaves from a certain tree, that the person who they declared had caused his death might die."<sup>3</sup> "There was, and indeed is still, a remarkable indifference about death. They speak of it and bid each other good-bye as if going on a short journey."<sup>4</sup>

When death occurs, loud and long lamentations were made by the relatives of the deceased, and friends coming near begin to join in the wailing (*teiye*)<sup>5</sup> at a distance from the house. In mourning, personal cleanliness was totally neglected, and the perforated lobe of the ear was torn open. The mourners sometimes cut their bodies

<sup>1</sup> This word is an euphemism. *Cf. Samoan faipo*, to do at night.

<sup>2</sup> A widow or widower is also sometimes called *pē fā* (*pē*, not), one with no husband. *Sine fœ* was also used for a widower. The word *sine* means "a part of," and *fœ* which represents the very widespread Oceanic word *soa*, *hoa*, may be regarded as indicating "persons in a dual relationship," "two companions." *Cf. Borneo sawun, sawa, sawe*, Philippine *asawa*, Sangir *sawa*, Solomon Islands *hua*, New Hebrides *soa*, *hoa*, all meaning "wife." In Samoan and Polynesian *soa*, *hoa*, *oa*, etc., "a mate, companion, friend."

<sup>3</sup> Macfarlane, *Story of the Lifu Mission*, p. 13.

<sup>4</sup> Macfarlane, *op. cit.*, p. 13.

<sup>5</sup> Silent grief is *tatesi*.

(nyio<sup>2</sup> i weipo) to show grief. Before the corpse was removed for burial a relative recited the virtues of the deceased.

An account of the Burial of the Chiefs Bula and Uatengé is given by Rev. G. Turner.<sup>1</sup>

#### 49. BURIAL.

The bodies of the dead were wrapped in a native mat, and were often simply laid in a hole, or lengthwise in a cave of some precipitous rock, difficult of access. As coral is found almost everywhere at a very little depth, a deep grave can only be dug on or near a sandy beach. In many cases burial took place in a grave dug in the ground, and the body was then usually bent with the knees up to the chest, as this was thought to prevent the deceased person from coming out of the grave and wandering about.

On the burial of a maker of thunder, lightning and rain, his body was placed in a sitting posture in the ground near his usual bathing place. Large flowers were placed in the ears and nostrils, which were cut in order to facilitate the escape of his spirit. The head was covered with the leaves of a red plant (*mamadrai*) and with a brilliant scarlet flower (*peled<sup>2</sup>*), in reference to the lightning, and the body was laid near water in order that rain might come.

Mr. Sleigh makes no mention of burial in a coffin (*puha*), but Macfarlane has the following: "Many when sick have their coffins made, that they may examine them before they die to see if they are properly cut. Their coffins are merely trunks of trees scooped out. Sometimes a native recovers after his coffin is made, upon which he suspends it from the roof of his hut until required. A few years ago there was a man not far from my station who, supposing that he was about to die, had his coffin made that he might see his future resting place. The coffin was made and laid beside him, and he pronounced it good. Afterwards, however, he recovered, but instead of suspending it to the roof of his hut he fixed it to an outrigger, and used it as a small fishing canoe."<sup>2</sup>

For sanitary reasons the missionaries discouraged the placing of graves near the houses or church. In the cemeteries the graves, on account of the difficulty in cutting away and digging, were covered with built-up or plastered coral. A grave is *hua*, the grave of anyone *la hu i angeic*. *Hu* is literally "the over."

#### 50. AFTER DEATH.

At the approach of death a person would name some animal, bird or insect, and this would be regarded after his death as his representative, and be held sacred by

<sup>1</sup> *Nineteen Years*, pp. 461-462. These were, however, buried in Samoan fashion by the Polynesian teachers.

<sup>2</sup> *Story of Lifu Mission*, pp. 13-14.

his family.<sup>1</sup> The ghost (*u*, chiefs, *ua*, *uati*) was believed to meet the relatives in this form from time to time.<sup>2</sup>

The soul was thought to depart from the body at death. Yet it lingered about and occasionally met the friends of the deceased.<sup>3</sup> These ghosts were more or less feared as likely to cause harm. A mother, whose husband had just died, would watch by her child lest its father should come and take it to be with him. In walking with others a ghost might be met with, and hence the centre of the company was preferred as being safer than the outside.

Ghosts were thought to utter in response or assent a short word “*ō*,” in a feeble voice, equivalent to “Here I am!” or “Yes!”<sup>4</sup> According to Erskine, the Lifuans “invoke the spirits of their departed chiefs. They preserve relics of their dead, such as a finger nail, a tooth, a tuft of hair, or some such thing, and pay divine homage to it. They have a Hades, too, which they call *Locha*.<sup>5</sup>”

## 51. TRIBES.

There is no distinct division of the people into tribes. People related to one another generally preferred to live together in the same locality under the rule and direction of one of the older members, who was called the *Joxu* or chief. Sometimes this person was called the *Keme*, i.e., father, the other members of the family styling themselves *la ite nekō*, i.e., children.

According to Cheyne, “The inhabitants of Lifu are divided into two tribes, who are independent and often hostile to each other. They are classed into kings (*angajoxu*), chiefs (*joxu*), landholders (*ate kē zin*), and slaves (*hlue*).”<sup>6</sup>

<sup>1</sup> Clo. What is the opinion of Pythagoras concerning wild-fowl?

*Mal.* That the soul of our grandam might haply inhabit a bird.

Clo. What thinkest thou of his opinion?

*Mal.* I think nobly of the soul, and no way approve his opinion. *Twelfth Night*, Act iv, Sc. 2.

<sup>2</sup> Mr. Sleigh has the following note: The name for soul is “*u*,” a word which is the same as that for “what?” and was perhaps applied to the soul as indicating their ignorance of it. *U* is also used as a verb meaning “to mind anything,” and seems to be radical in words for thinking, believing, and the like.

\* Macfarlane speaks of “the departed spirits of their fathers which they believed to be always near them. They thought that when the body died, the spirit still continued to roam about Lifu.” *Op. cit.*, p. 16. “They would often call to them (the spirits) for help. They supposed that they visited them in the night, and told them where they had left things that were lost.” *Op. cit.*, p. 17.

\* Cf. *Hinc exaudiri vocea, et verba vocantis*

*Visa viri, nox quam terras obscura teneret.*

*Aeneid* iv, 460.

\* *Journal*, p. 369, quoted from *Samoan Reporter*, 1845. Turner says, “The spirit is supposed to go westward at death, to a place called *Locha*.” *Nineteen Years*, p. 401. *Samoa*, p. 339. *Locha* is only found in Turner.

\* *Description*, p. 16.

## 52. GOVERNMENT.

The government may be described as patriarchal under recognised chiefs. A great chief (*angajoxu, joxucil*) ruled Wete, the northern part of the island, with Gaica, which had a subordinate chief (*joxu, muninge*). Another great chief ruled Losi.

In such a system of government the position and prerogatives of primogeniture were very great, especially on the death of the father. The elder brother was called by the younger their master (*tize*) or father (*kem*).

## 53. CHIEFS.

The chief's office is hereditary, and descends to his children or brothers. The rank in no case passed to his widow or sisters. If a deceased chief left a son in his minority, his brother, the child's uncle, acted as regent.

The chiefs were aided in the government by aged men (*gat*), as counsellors (*atesi, ate qeje pengōne*), whom they consult and who often did not hesitate to speak boldly to the chief (*usium eē la joxu*). Councils were held in the fenced court of the chief's house, or in the house there erected for strangers, sometimes in the *hnemelōm*.

The deference paid to chiefs among the people of Lifu is in very many ways of an extraordinary character both in action and speech. A chief's orders would be implicitly obeyed. He directed the disposal of property and controlled marriage. He fixed the time for gathering the harvest, and received its first fruits. Some foods, such as turtle, and new yams, eyes, heart and breast of slain enemies, were specially reserved for him. In early times he could order the killing of his subjects for his own food. Persons were careful not to crack a coconut so as to startle or disturb a chief. Special words were used when speaking to him, or about him. He was usually addressed in the dual number, as the presence of an attendant was implied (*cf. Salutations*). His death was always attributed to sorcery (*cf. Death*). Respect for the chief was expected from foreigners. An example of this is related by Bishop Patteson :

"It was a good sign that the respect for the chief was not diminished. One evening an English sailor who was employed in the sandal-wood trade was in the house conversing with Tutoo, when Angadholhua (*Angajoxu*) interrupted him, and he—in ignorance of the youth's rank—pushed him aside out of the way. The excitement was great. A few years previously the offender would have been killed on the spot, and as it was, it was only after apology and explanation of his ignorance that he was allowed to go free; but an escort was sent with him to a place twenty miles off lest anyone should endeavour to avenge the insult, not knowing it had been forgiven."<sup>1</sup>

<sup>1</sup> C. M. Yonge, *Life of J. C. Patterson*, London, 1874, I, pp. 362–363. Tutoo was the Rarotongan teacher landed by the Bishop in 1838.

## 54. CHIEFS' LANGUAGE.

The use of a ceremonious language used when addressing or referring to a person of high rank is an interesting and peculiar custom in Lifu and Nengone, but is strangely absent in the neighbouring island of Uvea. It is used by all persons of low rank, but is only used by a chief when addressing other chiefs, and not when speaking to inferiors. In speaking of himself or his own body, he uses the common terms to inferiors, but the ceremonious words when his audience is composed of men of rank.

The words changed in the chiefs' language are of all classes. The suffix *-ti* or *-wa* gives a word a respectful signification, and, generally, a word is lengthened when ceremonious, but most of the words used are quite different from those of common use. A word belonging to the ceremonious language may be made more respectful by the suffix *-ti*.

It does not appear that the words in the chiefs' language which differ from the common speech are other than Lifuan.

Many words in the ceremonious speech will be found in the various sections, and in the Grammar and Vocabulary. The following list gives some examples of its varied character.

Common.	Chiefs'.	English.	Common.	Chiefs'.	English.
haze	akōlesie, akōlesieti	god, fetish	hnimi	fetesi ...	to love.
	ak bōje, akukōjiti		kapa	nōli, wepengiti	to receive.
joxu, muninge	angajoxu, joxu cil	great chief.	musi, joxu	muzie ...	to rule.
		supreme chief.	thele ...	tel̄i ...	to seek.
hlue, sinelapa	hluewa, sinemunie	servant.	upe ...	upengiti	to send.
qat	tesihna kohoti	old person.	ole ...	oleti ...	to thank.
itrapel	dōzehti ...	hat.	mekune	mekuati	to think.
zi	inehoho ...	garden.	epine	epinti	future.
aja	hanenge ...	desire, will.	pē mejen	jaup ...	silent.
akōte	ugonye	pain.	e ce ...	enētilai	here.
eweki	ula ...	word.	qa ngone	cilate thauen	on account of, because.
mekuna	mekuana	thought.	ekoho	ekahoti	above.
maca	mecengō	right hand.	fe, fene	fewatin	below.
cele	celaniti	this.	koi	kowai	to (a person).
dei ?	deiti ?	who ?	koue la	koueti la	to the . . .
nemen ?	nemeniti	what ?	hnai	nōi ...	by (a person).
zōle	gōliti ...	to aid.	hnenge	n ng ti	by me.
sipo	zipo ...	to ask for, beg.	thatragai	thatrazaja	for (preposi- tion).
elē	hnyiketije	to go up.			
hunawang	hana xjavacatin ...	behold !	memin	memin̄iti	and, also.
he	xōnie, wezonieti ...	to call.	maine	zimaine	if.
ahnith	zawati ...	to command.	eje bi, he, o	ejiti, giūe	yes.
lololj, saqejē	zatingit ...	to hasten.	pekiō	qatikō	no.

Names of natural objects, animals and plants, and most implements and weapons, seem to have no distinct word in the chiefs' language.

## 55. MORALS. LAWS.

Very little has been recorded with reference to morality and laws of the Lifuans. Rochas remarks that their morals are equivocal as in New Caledonia.<sup>1</sup> Cheyne described them as "a treacherous and cruel race, and generally speaking great cowards. They are also much addicted to stealing, are great liars and seldom speak the truth even among themselves." "Polygamy to any extent is practised among them, and promiscuous intercourse before marriage allowed."<sup>2</sup>

According to Jouan, "Cependant, à Uvéa surtout les femmes ne sont si débauchées, ni faciles comme dans les îles de la Polynésie.

"La polygamie existe, au moins chez les chefs, qui prennent autant de femmes que bon leur semble. Il n'y a point de mariage, tout se résout au consentement des parties, qui se quittent et se prennent suivant leur caprice du moment."<sup>3</sup>

The comparison in favour of Uvéa is supported by Cheyne. "At this island (Uea) strict chastity is observed among both sexes before marriage, and promiscuous intercourse expressly forbidden."<sup>4</sup>

Mr. Sleigh notes that anyone suspected of causing the death of a chief was in danger of being killed. On one occasion the fingers of a young man were burnt off for stealing, although the actual burning was attributed to a demon.

## 56. LAND TENURE. INHERITANCE.

Macfarlane says of the Land Tenure, "Each family has its own plot of land, which is hereditary."<sup>5</sup> According to Mr. Sleigh, land was allotted to individuals by the great chief. The recipient regarded it as his own property, but was expected to contribute some of its produce to the chief as rent. On the death of the holder, the land usually descended to the eldest son, or failing a son to the elder brother of the deceased. Property might be inherited by females in the absence of male heirs, but not invariably so; much probably depended on the assent of the chief.

The chief "claimed the pine trees (called here *goiti*) on the point as his property."<sup>6</sup>

The Rev. J. Hadfield<sup>7</sup> notes that in Uvea when a man dies his property is given to his mother's relations. If it be land they take the produce, but the land itself is divided among the younger sons of the deceased. The eldest gets no land, but receives tribute from his brothers.

## 57. TRADE.

The word *itōn* is used for "trade" or "barter," a trader being *ate itōn*. A seller is *ate itōne tij*, the trader who leaves (*tij*), or *ate itō kapa mani*, the trader who receives money. The buyer is *ate itō hamē mani*, the trader giving money (*hamē*, to

<sup>1</sup> *Iles Loyalty*, p. 24.

<sup>2</sup> *Description*, p. 15.

<sup>3</sup> *Notice*, p. 373.

<sup>4</sup> *Op. cit.*, p. 25.

<sup>5</sup> *Story of Lifu*, p. 4.

<sup>6</sup> *Erskine, Journal*, p. 370.

<sup>7</sup> Letter to S. H. Ray.

give, *mani* from the English). I have no details of the trade. Jouan describes a certain amount of traffic between the Loyalty Islands and New Caledonia, and it is clear that the only trade was in that direction, for the New Hebrides group northward was quite unknown. "Les communications sont assez faciles ; la nature plate du terrain s'y prête. Je n'ai remarqué aucune industrie chez ces sauvages ; leur pirogues sont grossières et informes ; à Lifu il n'y en a presque pas ; la nature du rivage s'y oppose, tandis qu'à Uvéa, le beau temps qui règne presque toujours sur le lagon borde de belles grèves de sable, a contribué au développement de la navigation. Les gens d'Uvéa vont jusqu' aux îles Beauprés, éloignée de dix lieues, pour y faire des plantations. Les relations sont fréquentes avec la Nouvelle-Calédonie, dont on aperçoit distinctement les hautes montagnes d'Uvéa et de Lifu, quand le temps est beau. Un grand nombre d'insulaires s'engagent sur les bâtiments australiens ; aussi le nombre de ceux qui parlent anglais d'une manière à peu près intelligible est assez grand."<sup>1</sup>

Rochas writes : "Les communications entre les îles Loyalty et la côte orientale de Calédonie, surtout avec la tribu de Hienguène<sup>2</sup> sont fréquentes ; les indigènes d'Ouvéa ont même formé des villages en plusieurs localités de ce même littoral."<sup>3</sup>

### 58. WARFARE.

A man training for war lived unmarried for several years and was then regarded as an *ate ishi*, or warrior.

The younger brother of the principal chief acted as war chief (*tizene ishi*, i.e., master of fighting) and directed the combatants.<sup>4</sup> A village to be attacked was approached by a band of men (*zōte*) as secretly as possible, and a favourite method was to lie in ambush so as to attack by surprise at night. In proceeding along a sandy beach every warrior would step in the same footprints so as to conceal the number of the attacking party. Certain elevated spots were spoken of as watching or look-out posts (*ite ita ne wai ishi*). A fort (*hnapo* or *hunapo*) where watchmen (*ite te thup*) were set up (*hna acile*) was erected for security and defence in time of war. A tracking by footsteps was called *usigelene*.

Defiance of the enemy was expressed by repeatedly advancing and retreating, at the same time brandishing a weapon and scraping the ground with the feet. But although "there is great preparation, great skirmishing, great noise, but few lives are lost."<sup>5</sup> A challenge to single combat was called *wejewawa*.

Cheyne has the following account of fights in Lifu : "The hostile feeling of the two tribes makes war the chief employment of the men throughout the island. Their wars usually arise from some depredation or theft committed by the one party on the other—such as stealing a woman belonging to a chief, or to some

<sup>1</sup> Jouan, *Notice*, p. 373.

<sup>2</sup> Otherwise called Yengen or Yehen.

<sup>3</sup> *La Nouvelle Calédonie*, p. 115.

<sup>4</sup> Cf. Jouan, *Notice*, p. 373.

<sup>5</sup> Macfarlane, *Story of Lifu Mission*, p. 7.

person of importance—and generally ends in bloodshed—in the event of which, the king of the aggrieved party sends a formal declaration of war to the aggressor's tribe, and appoints a certain place and day for both armies to meet.<sup>1</sup> At the time appointed they assemble on a clear spot of ground between the tribes, and form in line abreast of each other<sup>2</sup> about a hundred yards apart. The battle is commenced by throwing spears from both sides, which they generally catch and throw back again. The two lines then make a charge, meet, exchange blows with their clubs in passing, and again halt at about the same distance, having changed positions. They continue these manœuvres until one party gets beaten. The victorious army carry off the bodies of their slain enemies, and, on their arrival at home, prepare a feast and have them cooked and eaten. The bones and skull, after having been clean picked, are hung up in the village council-house, and preserved as trophies. The king eats the eyes, heart, and part of the breast. The women are not allowed to partake of it at the public feast, but I have been told they sometimes get a portion from their husbands in private."<sup>3</sup>

A military expedition from Lifu is said to have founded a dynasty of chiefs on Kunie or Hunie (Isle of Pines). Glaumont gives the following account of the circumstances: "Des Canaques des Loyalty, venant de Lifu, abordèrent à l'île des Pins, à Gadji où régnait déjà des Mélanésiens venant de la Grande-Terre.<sup>4</sup> Ils croyaient peut-être l'île inhabitée, lorsqu'une fumée vint les aveugler. C'étaient les indigènes qui faisaient cuire leur repas. Le chef de Lifu et ses gens, furieux, se levèrent, attaquèrent les Kuniens et les défirent complètement. Ceux-ci ayant pu juger durant le combat de la valeur des Lifu, voyant qu'il étaient plus beaux, plus braves, plus forts qu'eux (n'oubliions pas que c'est un descendant des Lifu qui parle), ceux-ci, dis-je, les choisirent pour chefs, élurent un roi parmi eux, aidés de ces nouvelles alliés, attaquèrent les gens de Vao (élément hébridais), soumirent l'île à une seule autorité, et de lors la royauté fut solidement établie à Gadji."<sup>5</sup>

Before proceeding to battle a warrior placed water in the hollow part of a piece of coral, and drank from it, in order to make his heart hard like the rock. A woman whose husband or son was absent in war would place a piece of coral, to represent the warrior, on a mat before her, and move it about with her right hand to represent his movements in the fight. Then with her left hand she would brush away imaginary obstacles and evils. The warrior was thus thought to be protected by the charm performed at home.

<sup>1</sup> To meet for battle: *iōngi la lue ishi*, to join the two fights.

<sup>2</sup> To stand in battle array: *cila hmaca troa ishi*, stand again to fight.

<sup>3</sup> Description, pp. 16–17.

<sup>4</sup> i.e., New Caledonia.

<sup>5</sup> *Revue d'Ethnographie*, vii, 1889, p. 135.

## 59. RELIGIOUS BELIEFS.

The religion of the Lifu people consisted in a belief in the powers of certain "haze." A "haze" was any object whatever which had been *nyi haze* (made haze) or endued with supernatural power by the *ite tene haze* (or persons possessing the power of haze).

Early accounts supposed the "haze" to be objects of worship. Hence the Rev. G. Drummond and W. Harbutt stated that "this people used formerly to worship the nail of a man's toe, or a finger-nail, or a tuft of human hair put into a basket, and also stones of a peculiar shape."<sup>1</sup>

Rev. G. Turner says: "They preserved relics of the dead, such as finger-nails, teeth, and tufts of hair. These seemed to be their principal idols. The priests, when they prayed, tied on to their foreheads, or to their arms above the elbow, a small bag containing such relics of their forefathers similar to Nos. 1 and 2. On opening No. 2 I found it contained two finger-nails an inch long each, some smaller pieces, a leaf, a feather, a bit of coloured cotton rag, and a tuft of hair."<sup>2</sup> (Plate XII, 1.)

Jouan says: "D'après les missionnaires ces insulaires ne professaient aucun culte; leur notions religieuses étaient à peu près nulles. La croyance à une sorte de génie appelé *Aaze* à Lifu était tout ce qui rappelait l'idée d'un être supérieure."<sup>3</sup>

The *ite tene haze* were usually aged persons (*gat*) who received rewards from chiefs and people for exercising their powers. The possession of this power was not always a source of benefit to the possessor. In a bad season for yams, a great chief might send persons to kill the "rulers of seasons," for it was their duty to cause food to grow and abound.

A ghost or departed spirit was also sometimes called a *haze*. Macfarlane says: "On Lifu the natives had no idea of any God or devil, heaven or hell. Their religion or superstitious feelings were in connection with the departed spirits of their fathers." Cf. After Death.

The word *hmi*, which implies self-control and abstinence, has been adopted for the Christian religion. Roman Catholic Christians use the word *Haze* for "God," but the Protestants use the chiefs' word *Akōtesie*. The word *thil*, in chiefs' language *wakukup*, is used for "to worship"; the place of worship is *hu hna hmi*.

## 60. SUPERNATURAL BEINGS.

In Lōsi, which was the Mission district of the Rev. J. Sleigh, there is a forest called *Trethilo*, with rocky ground full of holes. This place was supposed to be frequented by a kind of fairies who stole children, embracing them with their long breasts and taking them to their holes. There the children married, and their progeny walked with inverted heads.

<sup>1</sup> *Samoan Reporter*, 1857.

<sup>2</sup> *Samoa*, p. 338. *Nineteen Years*, p. 338. The bags referred to as Nos. 1 and 2 are figured.

<sup>3</sup> *Notice*, p. 374.

The Rev. G. Turner states: "Laulaati was said to be principal god, who made a stone, out of which came the first man and woman."<sup>1</sup> *Ulipöme*, a huge fabled serpent, is mentioned in Mr. Sleigh's notes, as well as *Lue tilöpi*, two demons of Uvea, but there are no explanations. *Kolemija* was a demon seen in dreams, who caused disease. A giant was "a long man," *ate ka hoea*.

#### 61. OMENS.

Injurious influences were supposed to proceed from the forefinger of the right hand. Lifuans were reluctant to mention their own names, but various other names and nicknames were adopted for no particular reason. If a child pointed to a rainbow (*lewen*) it was thought and said that its mother would die.

Many deaths in a homestead often caused the inhabitants to remove. Earthquakes and inundations were supposed to be due to the agency of evil spirits or demons. (Cf. Food.)

#### 62. DREAMS.

Lifuans believe in the reality of what is seen in a dream (*pu*) and are influenced by it. Their dead ancestors appeared in dreams, and to dream of Kolemija caused illness. (Cf. Supernatural Beings.)

#### 63. DIVINATION.

There were persons who professed to find lost property by means of a piece of coral endowed with supernatural powers. Payment was made for the use of this to its possessor. The practice was called *saxepu*. Divination was called *ta*, sooth-saying *nyinyitha*.

Lottery was practised by drawing out a sprig of firtree (*uthidönegötün*, i.e., *uthi*, draw, *dö*, leaf, *ne*, of, *gotien*, fir tree) from a bunch of various lengths.

#### 64. MAGIC.

The professions of *tene haze* and of rain maker were hereditary in certain families. Mr. Sleigh left few details of magical practices, and I find very little referring to them elsewhere. A charm or amulet was called *hnepekomena*, the verb was *zahmi*.

According to Macfarlane: "Almost every man had his sacred object; each had its separate charm, and would only answer that purpose. Some were for making yams grow, others taro, others again bananas. Some were for causing rain, others wind, fine weather, according as the donor had indicated. In war they would take these sacred objects with them to render them invulnerable."<sup>2</sup>

A frequent way of causing disease was by various magical rites (*nyi haze*, making haze), such as placing skins of banana fruit or other refuse near the house door of the person to be injured.

<sup>1</sup> Turner, *Samos*, p. 338; also *Nineteen Years*, p. 401.

<sup>2</sup> *Story of Lifu Mission*, pp. 16–17.

A woman whose husband or son was absent in war would place a piece of coral to represent the warrior on a mat before her, and move it about with her right hand to represent his movements in the fight. Then with her left hand she would brush away imaginary obstacles and evils. The warrior was thus thought to be protected by the charm performed at home.

#### 65. CURSING. OATHS. EXCLAMATIONS.

Macfarlane says: "They had great faith in, and dread of, cursing. To be cursed by a parent or chief was regarded as the greatest calamity."<sup>1</sup> Mr. Sleigh notes that imprecation was a frequent method of causing sickness, so that one form of the verb *mec*, to be sick, is *mecijē pi*, or *mecijēju hi*, to be cursed. Some examples of cursing formulæ appear in Mr. Sleigh's notes, but they lack full explanation. Such are: *Loine toma tro ni a kuca lai!* *Thine ma mec!* *Sep'jē pi eō!* *Hnage i keme i hmunē* (or *eō*)! *Tepe i 'ō!* *Hnage i nyēn!* *Canga kōt!*

"One mode of cursing was, 'May your canoe drift to the north, where there are no islands!'"<sup>2</sup>

The name of a great chief is called out in expressing joy or surprise: *Bulati!* (chief's language) from the name of the chief Bula, *Nekō i Bula!* Son of Bula! *Nekō i qat!* Old man's son! *Ite nekō i Bula!* Children of Bula! to stimulate men in doing hard work.

In compassion, *He ho!* Poor thing! on seeing a person or pet animal in pain.

#### 66. SACRED OBJECTS AND CARVED IMAGES.

The sacred objects, *haze*, have been already referred to. "Their sacred objects were stones, finger and toe-nails, human hair, human bones, and human teeth. These were given to them by their fathers before death."<sup>3</sup> Carved figures of men, *ite hna saatē*, were made, but apparently had no place in the religious life of the people.

#### 67. MISCELLANEOUS RELIGIOUS PRACTICES.

In this section I give some words from Mr. Sleigh's lists which are apparently native terms, and suggest that the practices which they indicate were followed by the people.

*Xepu*, *iwejesanyi*, a vow. *Nyi xepu*, to make a vow; *sili xepu*, or *thupa xepu*, to pay a vow.

*Eikene ula*, an oracle (lit. a dwelling of words).

*Huj*, an offering, sacrifice. Hence words: *ate huj*, priest; *ita ne huj*, altar.

*Saisefran*, to consecrate to an office. The causative of *hmitōt*, *ahmitōtene* is used for "sanctify."

<sup>1</sup> *Story of Lifu Mission*, p. 13.

<sup>2</sup> Macfarlane, *loc. cit.*, p. 20.

<sup>3</sup> Macfarlane, *Story*, p. 16.

*Hedōmele*, a thankoffering. *Hedō*, to salute ; *hedōthe koi angeice*, to congratulate him ; *mele*, to live, life.

*La thithi*, prayer ; *thithi*, to pray.

#### 68. THE LANGUAGES OF THE LOYALTY ISLANDS.

Four languages are spoken in the islands of the Loyalty group. These are : (1) Nengone or Maré, in Britannia Island on the east ; (2) Lifu (in two dialects, Wete and Losi) on Chabrol, the central island ; and (3) Iai, and (4) Uvean, on the westernmost island of Halgan. Of these the Uvean (or Uean), spoken on the northern part of Halgan, is a purely Polynesian language, and totally unlike the other languages of the Loyalty group. The people speaking it are said to be the descendants of immigrants from the Wallis Islands (also called Uvea) in Central Polynesia, between Samoa and Fiji. Some specimens of this language are given in the Comparative Vocabulary, but it is not referred to in the remarks on the Loyalty languages which follow.

Short vocabularies and grammars of Lifu and Nengone were published by H. C. v. d. Gabelentz in 1861 and 1873. Dr. Codrington, in *The Melanesian Languages*, 1885, gives an independent grammar and vocabulary of Nengone. Père A. Chanel published anonymously in 1882 some notes on Lifu Grammar. For the Iai, the only published materials are imperfect vocabularies by Cheyne, 1852, and Pratt, 1886. Cheyne's vocabulary was named Uea, and this designation and vocabulary is copied by H. C. v. d. Gabelentz. Erskine gives the numerals of Lifu and two sets from Uea, one of which is Iai. Some school-books and the whole Bible have been translated into the languages of Nengone, Lifu and Iai, by missionaries of the London Missionary Society. To three of these, the Revs. J. Sleigh, J. Jones and S. Ella, all now deceased, I owe not only grammars and lengthy vocabularies, but many notes on details of the languages, derived from a correspondence which lasted for several years. I have also derived no small amount of assistance in these studies from the goodwill of the Rev. J. Hadfield, now the only representative of the London Missionary Society in the islands.

Though generally classed as Melanesian, the languages of the Loyalty Islands are very different from the typical Melanesian in the islands north of them. They do not show any very close resemblance to the languages of the Southern New Hebrides, which differ in many respects from the Central and Northern Melanesian. I have not yet been able to ascertain their exact relations to the languages of New Caledonia.

H. C. v. d. Gabelentz included the Loyalty Islands languages and those of New Caledonia in the Melanesian,<sup>1</sup> but his classification was not accepted by Friedrich Müller, who placed the Nengone (and by inference the Lifu) in a separate class

<sup>1</sup> *Die Melanesischen Sprachen*, Leipzig.

called by him Papuan.<sup>1</sup> But the term "Papuan" has been in later years more accurately used to denote languages found in the Melanesian area, which, like the majority of languages in New Guinea (otherwise Papua), cannot be compared grammatically with the Melanesian languages.<sup>2</sup> The Loyalty Islands languages are not of this character. There are undoubtedly agreements with the Melanesian in grammar and vocabulary, but many more differences, and these differences, moreover, are not uniform in the three languages of the group. Taking a few of the more prominent features of Melanesian grammar, we may note the following with regard to the three Loyalty languages:—

1. The pronoun suffixed to nouns when a possessive relation is expressed is fully used in Iai, but in Nengone and Lifu is only found in the first person singular and plural, the other persons using a preposition. Cf.:—

	Nengone.	Lifu.	Iai.	Fiji.	Mots.
My father ...	cica-ngo ...	keme-ny ...	kamō-k ...	tama-nngu ...	tama-k
Thy father ...	cece-nubo ...	keme i eō ...	kamō-m ...	tama-mu ...	tama-ma
His father ...	cece-nubone	keme i angeic...	kame-n ...	tama-na ...	tama-na
Our father (incl.)	cece-jē ...	keme shē ...	kamō-ta ...	tama-da ...	tamu-nina
Our father (excl.)	cece-hnij ...	keme hun ...	kamō-hmun ...	tama i keimami	tama-mam
Your father ...	cece-ni buhnij ...	keme i nyipunie	kamō-bun ...	tama-muni ...	tama-miu
Their father ...	cece-ni buic ...	kemi i angat ...	kamō-drin ...	tama-dra ...	tama-ra
My two eyes ...	rue waegogoiego	lue meke-ny ...	li emakō-k ...	na mata-nngu	na-mata-k
Thy two eyes	rue waegogo ni nubo	lue meke i eō ...	li emakō-m ...	na mata-mu ...	na-mata-ma
His two eyes	rue waegogo ni nubone	lue meke i angeic	li emaka-n ...	na mata-na ...	na-mata-na
Our eyes (incl.)	ko re waegogo ni ejē	ite lue meke shē	je emakō-ta ...	na mata-da ...	na-mata-nina
Our eyes (excl.)	ko re waegogo ni ehnije	ite lue meke hun	je emakō-hmun	na mata i keimami	na-mata-mam
Your eyes ...	ko re waegogo ni buhnij	ite lue meke i nyipunie	je emakō-bun	na mata-muni	na-mata-miu
Their eyes ...	ko re waegogo ni buic	ite lue meke i angat	je emakō-drin	na mata-dra ...	na-mata-ra.*

2. The Melanesian use of special nouns which indicate the kind of thing possessed is very prominent in Iai, where there are more words of this kind than in any Melanesian language. But in Lifu and Nengone similar words are rare, and are not used in apposition with other nouns.

<sup>1</sup> *Grundriss der Sprachwissenschaft*, 1888, iv Bd., 1 Abth., p. 19.

<sup>2</sup> Ray, *Reports of Cambridge Anthropological Expedition*, III, pp. 287-289, and pp. 517-519. P. W. Schmidt, "Die Sprachlichen Verhältnisse von Deutsch-Neuguinea," *Zeits. f. Afrik. ozean. u. ostasiat. Sprachen*, V, VI, 1902.

\* In these: *rue*, *lue*, *li* represent the numeral 2; *ite*; *je* are plural particles; *ko*, *re*, *na* demonstrative articles; *ni*, *i* the preposition "of."

Ex.—Iai : *ha-ok kumara*, my sweet potato ; *anyi-k hele*, my knife ; *beli-k wanu*, my coconut for drinking ; *hale-k buaka*, my pig ; *i-k nyei* or *ga-k nyei*, my field ; *de-k gethen*, my path ; *tang-uk tang*, my bag ; *tab-uk tap*, my seat ; *um-uk uma*, my house ; *hua-k hofuj*, my saying, etc.

Lifu : *Si-nq*, my animal property ; *a-nq*, my food ; *ime-nq*, my drink.

Nengone : *Kaka-go*, my food ; *kua-go*, my drink ; *sini nubon*, his animals.

Fiji : *nonggu vale*, my house ; *nggau*, my food ; *a kenggu na uni*, my yam ; *a menggu na yanggona*, my kava.

Mota : *nok wose*, my paddle ; *mok o vavae*, my word ; *gak o nam*, my yam ; *mak o pei*, my water.

3. The Pronouns.—In the Loyalty Islands the forms of these differ very much from those usual in Melanesia. (*Cf.* Lifu Grammar, Pronouns.)

4. Causative and Reciprocal Prefixes.—These are in derivation and use Melanesian. The Causative is *a* or *o*. (*Cf.* Lifu *a-loi-ne* (from *loi*, good), Nengone *a-roi-ni* (from *roi*, good), Iai *o-so-i* (from *so*, good), all meaning "to heal, make well," with Mota *va-wia* (*wia*, good), to bless, and Fiji *vaka-bula-i* (*bula*, in good health), to heal.)

The Reciprocal is *i*, *e*, or *ie*. (*Cf.* Lifu *i-hnimi-keu* (*hnimi*, to love), Nengone *e-ra* (*ra-ne*, to love), Iai *i-betengi-kōu* (*betenge*, to love), all meaning "love one another," with Fiji *vei-lomani* (*lomani*, to love), Florida *vei-dolovi* (*dolovi*, to love), with the same meaning.) This prefix is used with nouns. (*Cf.* Lifu *i-nu*, a grove of coco-palms, Nengone *ie ma*, collection of houses, with Fiji *vei vale*, cluster of houses.)

5. The Transitive Suffixes.—These appear in Lifu and Nengone, but are not so fully used as in Melanesia.

6. Plurals.—In the Loyalty languages the plural is indicated as in Melanesian by means of articles, collective nouns, demonstratives or pronouns.

7. The Verb.—The verb is conjugated as in Melanesia by particles, adverbs, or additional verbs. It is also conjugated by means of a preposition, which is exceptional in Melanesia.

8. Vocabulary.—Loyalty Islands words, even when they are cognate with the Melanesian, often appear in strangely different forms, no doubt due in part to the peculiar phonology. In the vocabulary the following words may be picked out as samples :—*Blood, bone, breadfruit, bury, child, daylight, eye, face, father, fish, flower, fruit, leaf, liver, louse, mother, name, navel, power, rain, rat, sand, say, sleep, steal, weep, wind.* In the equivalents of these words in the three Loyalty languages there appear to be some cases of agreement with the Melanesian.

#### 69. SKETCH OF LIFU GRAMMAR.<sup>1</sup>

1. PHONOLOGY.—The Lifu Alphabet has been already given. The vocabularies of the languages are so diverse that the equivalence of sounds has not yet been fully worked out.

<sup>1</sup> Many details are omitted.

2. ARTICLE.—The common demonstrative article is *la* : *la etē*, the stone ; *la ite ixete*, garments. The words *kete*, other, or *hete*, any, are used as indefinite articles : *kete ate*, other man ; *hete ate*, any man.

3. NOUNS.—(a) Many nouns and verbs have the same form. A verbal noun is formed by the prefix *hna*, which is also the sign of past time : *lapa*, to dwell ; *hnalapa*, a dwelling-place. An agent is indicated by *ate* prefixed. In the plural this becomes *angete* or *iteite* : *ate kuca*, doer ; *angete kuca*, doers ; *iteite anyipici*, things which cause truth.

(b) The plural is shown by various words preceding the noun : *ange*, *angete* (used only of persons) ; *angete akōte ni*, those that trouble me ; *ange keme*, fathers ; *ite* (used of persons and things in a restricted sense) ; *la ite thup'jiang*, my enemies ; *iteite* (things or persons which) ; *la iteite upi*, those that send ; *o* as in *o drai*, days ; *la o uma*, houses ; *i* (collective) *inu*, a grove of coco-palms ; *la ithup'jia*, the enemy ; *nōjei* (absolute), *la nōjei huliua*, all the works ; *la nōjei ate*, all the men. Things naturally dual have *lue* prefixed : *la lue hnangenyēng*, my two ears. *Ala* is prefixed when persons are referred to but not named : *la lue ate*, two men ; but *hna upi angate isa ala lue*, sent them each persons two, i.e., two by two.

(c) Gender.—Most names of male and female persons are distinct, but some relationship names are common gender. (*Cf.* Kinship.) In necessary cases the word *trahmany* for "male" follows. There is no definite word for "female." *Jajiny* is an unmarried girl, as in *nekō jajiny*, daughter ; *fō*, a married person ; *gate*, an old person of either sex. *Trahmany* is lit. membrum virile, and may be used of young son or daughter, *nekō trahmany*.

(d) Case.—Nouns are indeclinable. The subject precedes or follows the verb, according to the tense, or according to the particle used.

In the present tense with particle *a* the subject precedes, as e.g. : *Filipo a sa koi nyid'i*, Filip answered him ; *tetetroti a acilēnejē la nōjei wezipo*, the father raises up dead bodies. With the particles *kola* or *hē* the subject follows : *kola tropi la ate troa hulica*, goes forth the man to work ; *xulu hē la jō*, rises already the sun. *Hē* is sometimes *ha*.

In the future tense the subject follows the verb *tro*, go, used as the tense sign : *tro ha traqa la ite drai*, will arrive the days ; *tro kete tejin' a nue la kete tejine kowe la mec*, going one brother (to) leave the other brother to death.

In the past the subject is instrumental rather than nominative, and the preposition *hne*, by, is used : *hnene ha nōjei ate hna zomi kemeji*, the people (many men) took food, lit. by the people was taken food. But *hne* is not always used : *hnahna la enyi*, blew the wind ; *ame hna loipi la hlue i angeice*, then was healed the servant of him.

The direct object follows the verb as in the example just given. It also follows the indirect object : *tro ni a amamane koi nyipēti la ate*, going I (to) show to you the man.

**Genitive.**—This is indicated by the preposition *ne* before the article *la*, or by *i* with proper nouns or personal pronouns : *La nōjei ate ne la lapa*, the men of the village ; *la thine ne la nekōnate*, the mother of the child ; *la teisenie i Jesu*, the mother of Jesus ; *la ahnue i Petero*, the shadow of Peter. Sometimes the *ne* or *i* is suffixed to the noun : *la pune qina ne he*, the top-of mast of ship ; *hune la uma*, top of the house ; *hui angeice*, top of him. If two nouns come together the second qualifies the first : *engene sinōe*, flower (of) tree ; *uma etē*, house (of) stone ; *ate ishi*, man (of) war, warrior.

**Dative.**—The prepositions *koue*, to (things or persons before *la*) ; *koi*, to (proper nouns or personal pronouns), or *thatraqai*, for, are used : *hna kuca koi 'ō*, done to thee ; *koue la ate*, to the man ; *koue la lapa*, to the village ; *hna hamēne thatraqai nyipunie*, given for you.

Other examples of case are as follows :—

**Locative**—*e*, at, or *ngōne*, in. *E jidi*, at night ; *e cili*, there (at that) ; *ngōne la wet*, in the mountains.

Motion to—*eē*, therat, following the noun. *Hna kuiēne hnagejē eē*, cast into the sea ; *nge nyideti a thei angate Bethania eē*, then he led them to Bethany. This is very definitely a Melanesian idiom.<sup>1</sup>

**Ablative**—*qa*, from, often combined with *ngōne*, in or near to. *La mene ga Eaho*, the power from above ; *qa ngōne la ukeineqe i nyen*, from the mouth of him.

**Instrumental**—*hnei*, with, by (proper nouns) ; *hnene la*, with (common nouns). *La ite euke hna qaja hnei Paulo*, the things spoken by Paul ; *hnene la nōj*, by the people. This preposition with the pronoun is usual in expressing the past tense of the verb. (Cf. Nominative.)

**Vocative**—*Fe*, following the noun. *Itē joxu fe!* O chiefs ! *ange tejine fe!* Brethren ! Some nouns have a special vocative form. (Cf. Kinship.)

**4. ADJECTIVES.**—These follow the noun and are usually preceded by the particle *ka* : *la ate ka ngazo*, a bad man ; *la nōjei etē ka tru*, great stones.

In a genitive construction a verbal noun is derived from an adjective by prefixing *e* with the suffix *ne* : *tru*, great ; *etrune*, greatness of.

A causative verb is formed by the prefix *a* and suffix *nyi* (persons) or *ne* (things) : *atrungi 'ō*, magnify thee ; *atrungi Akōtesie*, magnify God ; *atrune la zi 'ō*, enlarge thy field.

If the noun qualified is land or buildings, *ga* is used instead of *ka* : *la hlapa ga keu kasa*, a field fruitful ; *ite ga jidi*, dark places.

A few adjectives are used without *ka*. *La lue lai atragat*, the two lights great ; *nyipi at*, man of rank, middle-aged man.

Comparison is only made by positive statements, the noun-preposition *hune* (before *la*), or *hui*, top, above, being used for "than": *Atragat Akōtesie hune la*

<sup>1</sup> Codrington, *Melanesian Languages*, p. 160.

*ate*, great (is) God above man; *tro ni a sisitia hui 'ō*, going I to excel above thee, I will be greater than thou. If there is a question, it is introduced by the phrase *hape u*, say what? *Hape u, tha tru kō la mele hune la zen*, say what, not great indeed the life above the food? is not the life greater than food?

The superlative is shown by adding *nyipi*, superior, very: *nyipi atragat la hna lepi angate*, very great the slaughter (of) them.

The numerals have been discussed in the section on Arithmetic.

5. PERSONAL PRONOUNS.—The Lifu pronouns are very numerous. There are distinct forms for the singular, dual, and plural, and the first person dual and plural express the inclusion or exclusion of the person addressed. Besides these there are distinct forms used according to the rank of the person or persons addressed or referred to.

#### First Person:—

Singular.—I, *ini*; when addressing chiefs, *inie*, *inieti*.

Dual inclusive.—Thou and I, *nyisko*; if one of us is a chief, *nyishoti*.

Dual exclusive.—He and I, *nyiho*; addressing chiefs, *nyihoti*.

Plural inclusive.—All of us, *eishē*; respectfully, when speaking to a number of persons, *nyishēti*.

Plural exclusive.—We others, *eēhun*; to chiefs, *eēhunieti*, *nyihunie*, *nyihunieti*, in increasing respect.

#### Second Person:—

Singular.—Thou: to inferiors, *hmunc*; to equals, *eō*; to superiors, *nyipe*, *nyipēti*; to a chief, *cilie*, *cilieti*, or *enetilai*.

Dual.—You two: *nyipo*; respectfully, *nyipoti*.

Plural.—You: to inferiors, *nyupun*; to equals, *nyipunie*; more respectfully, *nyipunieti*.

#### Third Person:—

Singular.—He, she: of an inferior, *nyēne*; of equals, *angeice*, *nyide*; of superiors or chiefs, *nyidēti*, *anganyidē*, *anganyidēti*.

Singular.—It: *ej*.

Dual.—They two: of inferiors, *nyude*; of equals, *nyido*; of superiors, *nyidoti*.

Plural.—They (persons): of inferiors, *nyuden*; of equals, or chiefs, *angate*.

Plural.—They (things), *ite ej* or *it'ej*.

This list gives only the principal forms; some are used in an abbreviated form, especially when used as possessives. (Cf. Languages of the Loyalty Islands.)

An inspection of the forms seems to show the roots of these words as follows:—

Singular.—1, *in*; 2, *pe*; 3, *dē*.

Dual.—1 (incl.), *sho*; 1 (excl.), *ho*; 2, *po*; 3, *dō*.

Plural.—1 (incl.), *shē*; 1 (excl.), *hun*; 2, *pun*; 3, *den*.

The Nengone pronouns show a similar formation :—

First Person :—

Singular.—*Inu, nu.*

Dual (inclusive).—*Etheue*; if one included is a chief, *sheue*.

Dual (exclusive).—*Ehne*.

Plural (inclusive).—*Eje*.

Plural (exclusive).—*Ehniye*.

Second Person :—

Singular.—*Nubo, bo*; to chiefs, *bua, buango*.

Dual.—*Hmengo*.

Plural.—*Buhnije*.

Third Person :—

Singular.—*Nubone, bone*; of chief, *nubonengo*.

Dual.—*Bushengone*.

Plural.—*Buic*.

So also the pronouns in Iai, which has no chiefs' language :—

First Person :—

Singular.—*Inya, in*. Dual (inclusive).—*Ötu*. Dual (exclusive).—*Öhmu*.

Plural (inclusive).—*Ötin, öta*. Plural (exclusive).—*Öhmun*.

Second Person :—

Singular.—*U*. Dual.—*Öbu*. Plural.—*Öbun*.

Third Person :—

Singular.—*E*. Dual.—*Ödru*. Plural.—*Ödrin, ödra*.

The forms of the plural ending in *u* are restricted to a limited number; those in *a* are universal.

6. POSSESSIVE PRONOUNS.—These have been already given. Cf. Languages of the Loyalty Islands.

7. INTERROGATIVE PRONOUNS.—The Lifuan interrogatives are: *dei?* of chiefs, *deti?* who? *nemen?* chiefs', *nemeneti?* what? *ka u?* what sort of? *e ka?* which? (lit., where? with the adjective particle). Examples: *Dei eje i hmun?* who is your name? *nemene la hnenge hna kuca?* what have I done? what the by-me done? *e ka la keme e'ō?* where is the father of thee?

8. DEMONSTRATIVE PRONOUNS.—This, *la*; or *celi*, following a noun: *la ate ce*, *la ate cel*, this man. That, *la*; or *cili*, following a noun: *la ate cili*, that man.

9. VERBS.—Verbs in Lifu are unchanged in conjugation. There are five modes: indicative, subjunctive, conditional, imperative and prohibitive. The first three are only differentiated by an introducing conjunction; the imperative by suffixed particles of direction. There are infinitive and participial forms. The

present and past tenses are shown by particles preceding the verb ; the perfect and future by auxiliary verbs. The following are examples of some verbal expressions in Lifu :—

- (a) Indicative present or indefinite, *a* : *Ini a qaja koi nyipunie*, I say to you ; *angeice a öhn*, he sees, or saw.
- (b) Indicative past, *hna* : *Hnei angeice hna uthepi la taua i angeice*, by him was drawn out the sword of him ; *hnei angate hna xomepi la etē*, by them was taken away the stone.
- (c) Indicative imperfect, *hē*, *ha*. *Kei hē angeic 'e kuhu hnadro*, he fell on the ground ; lit., fell he there above earth.
- (d) Indicative perfect, *ase hē*, is finished : *Ase hē angate thaucē nyiho*, they have beaten us ; *nge ase hē huni iahni, e'huni a elejē hune he eē*, after we had bidden farewell to one another we went on a ship ; lit., and finished we farewelling (reciprocal), we go-up on ship thereon.
- (e) Indicative future, *tro*, go : *Tro nyidēti a munuē nyipunie*, goes he gives you, he will give you ; *tro hē ni a aloinyi nyēn*, go I heal you, I am going to heal (make good) you.
- (f) Imperative : *Trohemī ma wange !* Come and see ! If addressed to a chief this is : *Jötētijē fe ma xajawatin !* Come oh and see ! *Amelē nyishiti je !* Save us !
- (g) Subjunctive, *mate*, that : *Pane qaja koi ni la hnei nyipēti hna ami nyidēti ngōn, mate tro ni a xomi nyidē*, first tell to me the by you was laid him in, so that go I take him.
- (h) Participle, *kola* : *La kola ishi*, the fighting ; *kola qaja la ite thoī*, speaking lies.
- (i) Infinitive, *troā* : *Hna tro troā thith*, went to pray ; *ijiji huni troā denge*, we ought to hear.
- (j) Conditional, *maine*, if : *Maine hēte ate a pi iji, trohemī ma iji theng ?* if any man wishes drink (let him) come and drink with-me ; *Maine eje thenge la hulō, qā i nyipēti hi troā humuthi ni*, If I have done wrong thou oughtest to kill me thyself. Lit., If thing with-me the evil, duty of thee only to kill me.
- (k) Negative, *tha*, not : *Tha meci kō la jajiny*, the girl is not dead ; lit., not dead indeed the girl ; *tha 'te kō nekō trahmanyi la kete ewekē*, the lad did not know anything ; lit., not know (*a* of *ate* elided after *a*) indeed child male the any thing.
- (l) Prohibitive, *the*, not : *The gou kō !* Fear not ! *the hmite kō !* do not stay ! *the tro eō a eno !* Thou shalt not steal !
- (m) Interrogative, *hape u*, say what : *Hape u, tha knenge kō hna latesi pine la ate ka akōt*, Did I not weep for the man in trouble ? lit., Say what, not by-me indeed was wept on-account-of the man troubled ?

- (n) Miscellaneous : *Tha tro kō angeice a ate loi, wanga teij*, do not let him know this, lest he grieve ; lit., not go indeed he knows this, lest grieve ; *loi e tro ni a meci enhila!* let me die now ! lit., good when go I die now ; *Nge dengē hē hani la tengē cili, ame hne huni me angete lapa e cili, hna shewo nyiditi, ka hape*, *The tro kō Dehu ei!* When we heard those things then we and they of that place forbade him, saying, Do not go to Lifu ! Lit., And (when) heard we the things those, then by us and those dwelling at that forbade him, saying, not go indeed Lifu thereat ; *tro ni a thue macanyi'ō lo hnenge hna troa öhn*, I will tell inform thee what I am about to see.
- (o) Verbal suffixes. Lifu verbs end differently, according to whether they come before a common noun with article, or before a proper noun or pronoun : *Ate humu at*, man killing man, murderer ; *humuthe la ate cili*, kill that man ; *humuthi shē*, kill us. A similar change takes place in causative verbs : *atrune*, enlarge (a thing) ; *atrungi* magnify (a person), from *tru*, great ; *amelene la ate*, heal the man ; *amelenyi ni*, heal me.
- (p) Directive adverbs are suffixed to the verb : *pi*, forth ; *ji*, out ; *ju*, down ; *mi*, hither ; *tropi*, go forth ; *trojē*, go out ; *trohemē*, come ; *xome*, bring ; *xomejē*, take ; *keiju*, fall down.

10. ADVERBS AND PREPOSITIONS.—These are numerous and comprise particles, verbs and nouns as in the Melanesian languages. The simpler prepositions have been illustrated in Nouns.

11. CONJUNCTIONS.—*Nge*, and, is used with verbal phrases and numerals : *galajē hnengödrai 'ē*, *nge wangeju la fene hnengödrai e kuku*, look up at the sky and look down on the earth beneath (*fene hnengödrai*, below sky, earth). Between nouns and expressions relating to nouns *me* is used for "and" : *thin, me kem*; *me ifekuku, me ite kuku*, *me ite hlapa*, mother, and father, and wife, and children, and lands.

12. INTERJECTIONS.—Some simple interjections are : *Eje hi!* yea ! *Ohe!* or *Peko!* nay ! *Ekolo!* alas ! *Ekele ni!* in admiration, surprise, joy or fear ; *He ho!* in compassion. Some exclamations have been noted in Cursing.

#### *Note on the Vocabularies.*

The words in the Loyalty vocabularies which follow are taken from the much longer lists which were received from the former missionaries in the Loyalty Islands. The Lifu I owe to Rev. James Sleigh, the Nengone to the Rev. John Jones, and the Iai to the Rev. Samuel Ella. The Uvean is partly due to the Rev. J. Hadfield, but many words have been added from a MS. Vocabulary of the Language by Mgr. Hilarion-Alphonse Frayase, the Vicar-Apostolic of New Caledonia. The latter list I owe to the kindness of the Ven. Archdeacon H. W. Williams of Gisborne, New Zealand.

The words in the Comparative Table are compiled from various sources. Balad

from Fabre and Gabelentz<sup>1</sup>; Yengen and Kanala from MS. lent to me by Rev. J. Hadfield; Webias, Manongoes and Wameni from anonymous notes published in Paris<sup>2</sup>; Wagap from the Marist Mission<sup>3</sup>; Ponerihouen and Wailu from translations of Gospels<sup>4</sup> which I owe to the kindness of the Rev. Dr. Kilgour, of the British and Foreign Bible Society; Nekete from the Marist Mission<sup>5</sup>; Tuauru from Rev. G. Turner<sup>6</sup>; Morare and Aneiteum from Rev. J. Inglis<sup>7</sup>; Eromanga and Tanna from Rev. D. Macdonald.<sup>8</sup>

More extended comparison should be made with Dr. Codrington's *Melanesian Languages*,<sup>9</sup> and my own lists from the New Hebrides.<sup>10</sup>

The words are written as far as possible in the Lifu orthography. But the *j* of Balad and Yengen, the *ti* and *ty* of Webias and Wagap and the *g* before *i* in Kanala and Nekete are probably meant for the Lifu *c*. The *h* (underlined) of Nekete is a strong aspirate and is probably the same as Lifu *x*.

<sup>1</sup> (a) "Vocabulaires Polynésiens" composés en 1845 par M. Fabre. *Revue Coloniale*, XII. Paris, 1847, p. 165. Vocabulaire du Havre Balade et des environs. (b) *Die Melanesischen Sprachen*, by H. C. von der Gabelentz, Leipzig, 1873. The words from Gabelentz in brackets.

<sup>2</sup> *Notes pour servir de point de départ à la formation d'un vocabulaire des idiomes parlés par les indigènes de la Nouvelle Calédonie*. Paris, 1877.

<sup>3</sup> "Vocabulaire de la langue Wagap." *Actes de la Soc. Philologique*, XXI. Paris, 1892, pp. 1-151.

<sup>4</sup> (a) *Mareko*. Paris, 1910. (St. Mark's Gospel in Ponerihouen.) (b) *Virîtrî i Jésus Kériso na sou na Mataio*. Paris, 1910 (St. Matthew in Houailou). (c) *Virîtrî i Jésus Keriso na sou na Joane*. Paris, 1910 (St. John in Houailou).

<sup>5</sup> "Vocabulaire des mots les plus usuels de la langue de Nékété de Thyo." par un missionnaire mariste, mis en ordre par le P.A.C. s.m. *Revue de Linguistique*, XXI. Paris, 1888.

<sup>6</sup> *Samoa a Hundred Years Ago and long before*. By George Turner, LL.D. London, 1884. Appendix: One hundred and thirty-two words in Fifty-nine Polynesian Dialects. (Words in brackets are from Gabelentz, *Melanesischen Sprachen*, 1861.)

<sup>7</sup> *Report of a Mission Tour in the New Hebrides, etc., in the year 1850*. By Rev. John Inglis. Auckland, N.Z., 1851. (b) *A Dictionary of the Aneityumese Language*, London, 1882.

<sup>8</sup> (a) *Three New Hebrides Languages*. By the Rev. D. Macdonald, Melbourne, 1889. (b) *South Sea Languages*. By the Rev. D. Macdonald, Melbourne, 1891. The Tanna is Weasisi dialect.

<sup>9</sup> *The Melanesian Languages*. By R. H. Codrington D.D., Oxford, 1885.

<sup>10</sup> "The Languages of the New Hebrides," *Jour. and Proc. Royal Soc. New South Wales*, XXII, 1893.

70. COMPARATIVE VOCABULARY OF LANGUAGES OF THE LOYALTY ISLANDS.

	Lifu.	Lifu (Chiefs').	Nengone.	Nengone (chiefs').	Int.	Uvea.
Adze	...	thil ...	...	...	—	—
Arm	...	ine ...	...	...	benyin	...
Arrow	...	pelua	...	...	fana	...
Axes	...	lmatesif	...	...	lmabochit	...
Axe	...	nganga	...	...	giwa	...
Bad	...	ngago	...	...	kong	...
Bamboo	...	—	—	—	ngayo	...
Banana	...	wanawa, wanamono	—	—	kolo	...
Butter	...	itüne ...	...	—	futi	—
Bucket	...	tengeno	...	—	—	—
Beach	...	zahnelingall	...	—	hete, tangat	—
Bed	...	gohna	...	—	tafa tni, taftaone	—
Belly	...	upone, hui	...	—	fla-moe	...
Bird	...	fini ka seeñ, waco	...	—	tinue	...
Bite	...	hejo	...	—	mankole	...
Bitter, salt, &c.	...	xëk, bait	...	—	fejü	...
Black	...	weteweto	...	—	kakahn, noea	—
Blood	...	madro	...	—	uli	—
Board	...	ino he	...	—	—	—
Boat	...	he	...	—	ma-i-lukau	—
Body	...	ngihnetei	...	—	vitez, galu	—
Bone	...	ji, fune	...	—	tonna	—
Bow	...	pane pelma	...	—	fvi	—
Bowels	...	ixele	...	—	kaufana	—
Bowl	...	lumeto	...	—	vai	—
Boy	...	nekö-trahmany,	—	—	—	—
		thöthli (laot)	—	—	met	—
Broadfruit	...	wen'on	...	—	fatatao, li bai	—
Breast	...	thi, mano	...	—	konam	—
Bury	...	kelem	...	—	waleaba	—
Butterfly	...	fenifen	...	—	wapepe	—
Buy	...	itüne ...	...	—	uehu, faitan	—
		itüne ...	...	—	—	—

70. COMPARATIVE VOCABULARY OF LANGUAGES OF THE LOYALTY ISLANDS—continued.

	Lifu.	Lifu (Chief's).	Nengone.	Nengone (Chief's).	Iai.	Uvea.
Calf of leg	fengonenken	...	—	—	wanon-can...	—
Chest	māno ...	...	...	...	qian	...
Chief	joxu, muninge	...	...	...	than	...
Child	nelkōnate	...	xewe, xezawenie, xerezieni	...	wanakat	...
Cloud	...	awe ...	...	...	dia	...
Club	...	jia ...	...	...	utöhmu	...
Coconut	...	ono ...	...	...	wamu	...
Cold	hmöt (n.), lepanyi (a.)	...	leulebus, ceone	...	megio	...
Come	...	traqa ...	...	...	o thô, o but	...
Darkness...	jidi, melöhlem	...	...	...	lit ...	...
Daylight	drai ...	...	...	...	lany	...
Destroy, v.	apaten	...	ajifelkōnëi elelengi	...	ohia	...
Die	meoi ...	...	ataekongomej	...	mekou	...
Dig	...	sine, jelo	...	...	hiny kand	...
Do	kon, lo	...	atakeni	...	anya	...
Dog	vialit ...	...	tanigo	...	keuli...	...
Door	thingene la qehnold ...	...	da ...	...	hinginy whanuma	...
Doorway...	qehnold	...	ilone ...	...	whanuma ...	...
Drink	ij ...	...	paialai ...	...	io, ijem	...
Dust	thotho, xaxan	...	pa ma...	...	sesia	...
Dwell	lapa ...	...	...	...	labu	...
Ear	luangenyé	...	...	...	kyukonyen	...
Earth, soil	lmadro	...	...	...	kand	...
Eat	xeni ...	...	...	...	han	...
Egg ( <i>hen's</i> )	nolkö i gutu, qakuth	...	...	...	wakuniny khoto	...
Elbow	watingenoinm	...	...	...	bokujin-bonyin	...
Eye	alamek	...	...	...	warowo	...
Fago	qemeko	...	...	...	emataan	...
Father	lome ...	...	...	...	lynymakian	...
Fear, v.	qon ...	...	...	...	kamen	...
Feather	pene ...	...	...	...	ot	...
Female, a.	ise ...	...	...	...	lefneu	...
		...	...	...	mono	...

## 70. COMPARATIVE VOCABULARY OF LANGUAGES OF THE LOYALTY ISLANDS—continued.

Lifu.	Lifu (Chiefs').	Nengone.	Nengone (Chiefs').	Ini.	Uvea.
Finger	wauakōim	...	wauakōthemic	...	moko-i-lims
Fire	es̄	...	iel	...	af
Fish	i	...	wei'io	...	ika
Fish-book	gī	...	wauacaca, wagi	...	—
Flesh	ij̄em	...	ia	...	tenua, io
Flower, n.	engene	...	engeno	...	so, heo
Fly, n.	nengo	...	nengo	...	lango
Fly, v.	sheabū, xepū, juu jē	...	dede	...	—
Food	xeni, gōni, gai, wetē	...	kaka	...	lei, oeo, puli
Foot	waca	...	arada	...	vae
Porehead...	gōpadi, nungedo	...	gupadi	...	las
Towl	(m.) gata (f.)	...	titewe...	...	koto
Fruit	wen	...	waweno	...	fua
Girl	nakō-ja-jinjy	...	conewe	...	tamahine
Give	lare...	...	kanono	...	soli mai
Gnat	nekōtualā	...	wagidrogidro...	...	—
Go	tro	...	hue	...	hano
Good	lō	...	roi	...	male
Great	atruatae, tru	...	hmānai	...	efā, auā
Hair of body	ipene	...	dine	...	fulo
Hair of head	ilō, ipeno lu	...	direluwo	...	launu
Hand	iwanakōimo	...	aramino	...	lima
Hard	ate, xeti	...	tace	...	kiatō, maniac
Head	le	...	havo	...	ilo
Hear	dango, dei	...	taedeng!	...	longona
Heart	uni	...	huore	...	fatumanaha
Hill	wete	...	woco	...	maunga
Hot	wele	...	ceucawsa	...	vela
House	uma, linalapa	...	'mu	...	tale
House (Common)	linemelōm	...	eekon, aea'ma	...	—
Husband	fōe	...	cahmūne	...	habuna, ava
Iron	fao	...	fao	...	—
Kill	humuth	...	atangoni	...	unath, lige

70. COMPARATIVE VOCABULARY OF LANGUAGES OF THE LOYALTY ISLANDS—*continued.*

70. COMPARATIVE VOCABULARY OF LANGUAGES OF THE LOYALTY ISLANDS—continued.

	Lifu.	Lifu (Chets).	Nengone.	Nangono (Chets).	Iai.	Uvea.
Paddle, <i>v.</i>	... galu ...	... galu ...	xuru ...	gulu	... ma-i-galu, wasato	...
Peace, <i>n.</i> ...	... loisuje, tingtinge	... loisuje, tingtinge	dongodongo ...	deokōtā, hmalic	... tenia	...
People	... puaka...	... puaka...	... puaka...	tavat	... puaka	...
Pig	... men ...	... men ...	nene ...	buaka	... pale	...
Power	... eioru, hati	... eioru, hati	... ele	man	... ua	...
Pungent, ...	... mani ...	... mani ...	xeli ...	uhotuk	... we ...	...
Bain	... afi ...	... afi ...	kaubit	tep ...	... kinoa	...
Rat	... hati ...	... hati ...	deradera	hit	... mala	...
Raw	... pakulu ...	... pakulu ...	kene, hmede	dra	... tote, melo	...
Red	... hmede, maejje	... hmede, maejje	lens	mat	... elo	...
Ripe	... gojeny, gojēsan	... gojeny, gojēsan	wēne	gethen	... ala	...
Road	... iware	... iware	waenē	hwœin	... ulu, fali	...
Root	... eno ...	... eno ...	—	tō ...	... kolo, awaka	...
Rope	... sago (introd.)	... sago (introd.)	—	—	—	—
Sago	... sinyeu	... sinyeu	sinyeu	baryād	—	...
Sail, <i>n.</i>	... alus (introd.)	... alus (introd.)	alase (introd.)	salt (introd.)	—	...
Sand	... ngéni ...	... ngéni ...	ganin	ōn	—	...
Say	... hape, qafə, ðui	... hape, qafə, ðui	ie	ha	—	...
Scratch, <i>v.</i>	... xoë, xo	... xoë, xoë	olongati, ulati	adribit	... alatia	...
Sea	... lñagojë, lñahede	... lñagojë, lñahede	lñatefeniä	käü	... tai	...
See	... gñae ...	... gñae ...	lñaeätné	ha	... kilo, kilo	...
Sell	... itöne tñi	... itöne tñi	—	—	—	...
Shark	... edto ...	... edto ...	—	rowone	... mango	...
Sit	... lopo ...	... lopo ...	mune, munett	—	... hno, hno	...
Skin	... lupein	... lupein	—	mune	... langi	...
Sky	... lñengödräi	... lñengödräi	—	nenuo	... moe	...
Sleep	... melkélé	... melkélé	hueðë, hueldë	awe	... iviki, wenelik!	...
Small	... eo, nene	... eo, nene	jifino ...	thaete	... auifi	...
Smoka	... hajj	... hajj	—	waamî	... une, tei, hu	...
Snake	... une	... une	—	lcall	... moto	...
Soft	... manyik, panupani	... manyik, panupani	—	une	—	...
Sour	... memeké, luneng!	... memeké, luneng!	—	irumodo	—	...
			—	neineeo	—	...
			—	—	miminy	...

## 70. COMPARATIVE VOCABULARY OF LANGUAGES OF THE LOYALTY ISLANDS—continued.

	Lifu.	Lifu (Chiefs').	Nengone.	Nengone (Chiefs').	Iai.	Uren.
Speak	... ewékō, ithanata	... ulatine, ijawanatati...	nengoco	... beredonelo	... fuc ...	... mutangi
Spear	... jo	... ...	cace	... ...	... ö	... tuo
Spider	... no, nonyu	... ...	buyu	... ...	... wahuhua, bolidök	... nama
Spirit	... n	... ...	ueni	... ...	... hanu	... ato, hano
Spit	... lnyijuo	... ...	kadew	... ...	... hangoe	... —
Spittle	... irahnyijuo	... ...	serolu ; pucalo (wp)	... ...	... tot, todri (wp)	... tu
Stand	... weteisj	... ...	wajekole	... ...	... okhū	... fetu
Star	... lapa	... ...	sorelu	... ...	... laba	... flainut
Stay	... énu	... ...	eno	... ...	... vendu	... faunu
Steal	... otö	... ...	öte	... ...	... yeto	... fata
Stone	... crato, egócate, blep	... ...	engetace	... ...	... whego	... maleke, tumi
Strong	... wia	... ...	waea	... ...	... akú	... tolo
Sugar-cane	... jo	... ...	du	... ...	... setuno	... lau
Sun	... lnyapa, lnenosien	... ...	buruiua	... ...	... lnebwina	... —
Sweet	... hmitöt	... ...	lmbijoce	... ...	... kap	... tapu
Tabu, holy	... inagaj...	... ...	wnani	... ...	... konying	... talo
Taro	... domi-erpath	... ...	kaka, tubanide	... ...	... drom, cubeä	... —
Taste, v.	... hmekün, hnyipé	... ...	coede	... ...	... haki	... matolu
Thick	... inea, henethu	... ...	wabuiu	... ...	... jevan	... kavanga
Thigh	... celele, hmelele	... ...	nerore...	... ...	... delhi, haléjüä	... manifi, knla
Thin	... qahn yeto, nyinawa	... ...	waunapo	... ...	... jeköwin	... fakakti
Throat	... thinema	... ...	gutinene	... ...	... bolmen	... alelo
Tongue	... nyö	... ...	go	... ...	... nyu...	... nifo, niho
Tooth	... sindö	... ...	sere, ie	... ...	... tóö	... lakeau
Tree	... hmathap	... ...	thele...	... ...	... hyigöulen, bieen	... —
Valley	... lepa	... ...	Imamenenge...	... ...	... lnyahla	... mohale
Village	... tim	... ...	wi	... ...	... köös	... matai
Water	... teijo, latesi	... ...	shetü...	... ...	... tengo	... oi
Weep	... wiëwë	... ...	mono	... ...	... hanu	... sına
White	... fee, ifenekö	... ...	gads	... ...	... áiliu	... habana, ava
Wife	... enyi	... ...	hnennö	... ...	... ongiashola	... matangi
Wind	... iap	... ...	yengo	... ...	... labenyin	... pakakanu
Wing			katandé	... ...		...

COMPARATIVE VOCABULARY OF LANGUAGES OF THE LOYALTY ISLANDS—*continued.*

### 71. THE LIPU LANGUAGE COMPARED WITH THE LANGUAGES OF NEW CALEDONIA AND THE SOUTHERN NEW LLEBIDES.

71. THE LITU LANGUAGE COMPARED WITH THE LANGUAGES OF NEW CALEDONIA AND THE SOUTHERN NEW HEBRIDES—*continued.*

### 71. THE LIFU LANGUAGE COMPARED WITH THE LANGUAGES OF NEW CALEDONIA AND THE SOUTHERN NEW HEBRIDES—*continued.*

	Sun.	Moon.	Star.	Fire.	Water.	Pain.	Stone.	Pig.	Bird.	Fish.
Aneiteum	nangesengs, netting	Inmokog	Inmoityev	ingop	...	inwai	...	ingophua	inhat	...
Eremanga	nipni-pen	italis	mosi	...	nom	...	...	noiseip,	vat	...
Tanna	mutingar	mauang	mabau	...	ninguro	...	nahu	nebip	...	menok
							...	nu'wan	...	...
							...	kabil	...	pukat
									...	manug
									...	namu

	Tree.	Co-opalm.	House.	Bont.	Father.	Mother.	Eat.	Drink.	Live.	One.
Baled	jeko (tek)	nn (---)	mun (---) ...	haliona (---) ...	thiamia (tianan) ...	aba (min) ...	onda (imdu) ...	maolep (maolep) ...	kalaita (kalaita)	
Yengen	jek (cek)	trep	ngq, unga (ngq)	wong (wong)	trelin	qiaman	kundruk	marip ...	he (heis, hee)	
Webias	tiok... seut	tiep... nu ...	ngu	wang	—	q	kondu	—	tie-tien	
Wagap	upu...	nu ...	mua	wong	cn ...	ui, nuna	undu	multip ...	cen	
Ponterihun	ké ...	—	ngwa	wengia	caa	iija ...	—	worn ...	jo	
Wailiu	kwa ...	nu ...	moa	koia	peva	ara ...	wayo ...	mora ...	ndexa	
Kanala	kwa	nu ...	mwa	kwa	apa, panére	amunyire	wingio	mulu ...	sa	
Nekete	kwan	nu ...	mwa	korbá, potó	apa	amunye, nya	ii	—	cá	
Lifu	sinôe	nu ...	uma	he ...	keme	ken, fuo,	mel ...	—	easi	
Tuauro	ngoe (ngoe)	ni ...	uma (uma, uama)	niú ...	cien (cien)	xeni	kou (gr)	omolu (omoro)	ta (ta)	
Moraro	—	nyi ...	—	—	—	—	—	—	ta	
Manongoes	—	nyi ...	—	—	—	—	—	—	ta	
Waimeui	kwa	—	ma, tonia	kanu	apa	nia ...	—	—	sa	
Aneitonga	ngui	newing	ma ...	kwan	etman	riau ...	—	—	ethi	
Feromanga	nei ...	nokti	neom, nium	navelgau	itemen	dineno ...	—	umoh ...	sai	
Toma	ningi	nien	nimo ...	lo ...	itemen	itin	—	marep ...	kadi	
			imwa	nengau	timin	...	... ... ... ... ...	umuyi moneki amanum	... ... ...	

71. THE LIFU LANGUAGE COMPARED WITH THE LANGUAGES OF NEW CALEDONIA AND THE SOUTHERN NEW HEBRIDES—*continued.*

	Two.	Three.	Four.	Five.	Six.	Seven.	Eight.	Nine.	Ten.	Twenty.
Balad	... karu (karu)	kartiene (kartien)	kartebute (kartbat)	kanene (kanem)	kanenogi (kanemdi)	kanenedu (kanondu)	kanenebaste (kanonchot)	karuli (karunli)	bar-karuli (kaluit at) kahe-kahe	bar-karuli (kaluit at)
Yengen	... helu (heluk)	heien (hoyer)	povic (povits)	nim (nim) ...	nim-bweeñ (nim-wet)	nim-ba-lu (nim-we-luk)	nim-po-vic (nim-po-vis)	manhe (painduk)	catic-cateu ... —	manhe (painduk)
Webias	... tie-luk	ti-én	poetien	nim... ... pa ...	ni-tietien ... ... nim...	ni-én ... ... ni-én	ni-poetien ... ... ni-én	pain-do padyu, lubua-inye	—	ni-poetien ... ... ni-én
Wagp	... alo ...	ce ...	...	...	...	...	...	pa-puan	aboro	pa-puan
Ponevhuen	eneilu, dru...	eneic	enebabo	...	eukeveja	...	...	...	...	...
Waihu	... karu	kariri	lavuo	...	kanli	...	goro-eaywi	...	paroto	...
Konala	... mbaru	baat	...	kenefuo	...	korenuu	...	ma-kariri	kamo	ma-kariri
Nekete	... baru, du	baci	...	kanefue	...	kanenunu,	...	kerenunu-	kesakhu.	kerenunu-
Lifu	... luu ...	köni	...	ekte ...	...	benehen	...	ba-lu	—	ba-lu
Tuaura	bo (po) ...	beth (peti) ...	bou	...	taküe (tukue)	no-ta	...	ba-hue	...	ba-hue
Moraro	... polu	peni	...	pen	...	ta	...	ba-hue	...	ba-hue
Manongoes	... pam	peti ...	...	pen	...	no-ta	...	ba-hue	...	ba-hue
Wanenai	... haru	...	basi, base	kluituo,	...	klan-nana	...	ba-hue	...	ba-hue
Anoiteum	ero, ohwat...	esoty	...	komfue	...	nikman	...	...	...	...
Eromanga	dini	desei	...	emanowan	...	sukrim	...	sukrim-naru	...	sukrim-naru
Tanna	...	kaiyu	...	devat	...	karilum-hadi	...	karilum-kaiyu	...	karilum-kaiyu
		kisil	...	kuvert	...	karilum-kisił	...	karilum-kisil	...	karilum-kisil

## 72. BIBLIOGRAPHY.

I give here the full titles of books referring to Lifu which are quoted in the preceding pages. A few other titles are added, with a note on Books in the Lifu Language which are known to me. The titles of books on New Caledonia or elsewhere are not entered unless they have a distinct reference to Lifu, but their full title is given when quoted.

(a) *Books containing References to Lifu.*

1. "A Comparison of some of the Dialects of Western Polynesia," by George Turner, *Samoan Reporter*, No. 5. Samoa, March, 1847, p. 4.  
Among the Languages are those of Lifu, Negone (*sic*) and New Caledonia.
2. *The Natural History of the Varieties of Man*, by Robert Gordon Latham. London, 1850.  
Contains (p. 262 ff.) an account of the Fiji native "from the island of Lafu," who was really a native of Lifu, Loyalty Islands.
3. *Report of a Missionary Tour in the New Hebrides, etc., in the year 1850, on board H.M.S. "Havannah,"* by Rev. John Inglis, Auckland, 1851. 47 pp.  
Contains (pp. 34–43) short vocabularies of the Languages of the Loyalty Islands (Mare or Nengone, Lifu, Uea).
4. *A Description of Islands in the Western Pacific Ocean*, by Andrew Cheyne. London, 1852.  
Contains accounts of the Loyalty Islands, and on p. 179 a Lifu Vocabulary, on p. 183 an Uean Vocabulary.
5. *A Journal of a Cruise in the Western Pacific*, by J. E. Erskine. London, 1853.
6. "Report of a Missionary Tour in the New Hebrides, etc., in the year 1850, on board H.M.S. 'Havannah,'" communicated by the Right Hon. Earl Grey, Principal Secretary of State for the Colonies, and read 11th December, 1851. *Journal, Ethnological Society III*, 1854, pp. 53–85.  
A reprint of No. 3.
7. *La Nouvelle-Calédonie. Voyages—Missions—Mœurs—Colonization (1774–1854)*. Par Charles Brainne. Paris, 1854.
8. *Gems from the Coral Islands*, by William Gill. London, 1855.  
Contains (p. 17) Numerals, Loyalty Island (*i.e.* Lifu); pp. 185–189, History of Mission on Lifu; pp. 200–202, an account of the Island of Toka.
9. "The Twelfth Missionary Voyage to Western Polynesia." *Samoan Reporter*, No. 19, October, 1857.  
Contrasts the past and present condition of the Lifu people.
10. "Îles Loyalty." Victor de Rochas. *Bulletin de la Soc. de Géographie*, IV ser., tome xx. Paris, 1860, pp. 5–27.
11. "The Fourteenth Missionary Voyage to Western Polynesia." *Samoan Reporter*, No. 21, March, 1860.  
Account of the Island of Toka. Landing of first European Missionaries on Lifu.
12. "Die Melanesischen Sprachen," von H. C. von der Gabelentz. *Abhand. d. phil.-hist. Classe d. Königl. Sächsischen Gesellsch. d. Wissenschaften*, III, Leipzig, 1861.  
Contains (pp. 208–213) a short vocabulary and grammar note on Lifu, also similar accounts of Nengone and Baladea (*i.e.* Tuauru) of New Caledonia.
13. "Notice sur les îles Loyalty, Nouvelle Calédonie," par, M. Jouan, lieutenant de vaisseau. *Revue Maritime et Coloniale*, Paris, 1861, pp. 363–375.

14. *Nineteen Years in Polynesia*, by George Turner. London, 1861.  
P. 397, Some brief notes on Lifu; pp. 400–441, Notes on the people; pp. 459–462, Notes on disease, death and burial; p. 504, Note on the pumice at Toka.
15. *Elements of Comparative Philology*, by R. G. Latham. London, 1862.  
P. 341 quotes Lifu numerals from No. 12.
16. *La Nouvelle-Calédonie et ses Habitants. Productions—Mœurs—Cannibalisme*. Par V. de Rochas.  
Pp. 84–98, Dépendances de la Nouvelle-Calédonie, Iles Loyalty.
17. *Missions in Western Polynesia*, by A. W. Murray. London, 1863.  
On pp. 266–269, account of New Caledonia; on pp. 297–324, Mare or Nengone; pp. 325–356, Lifu; pp. 442–448, supplementary.
18. "On the Peculiar Crania of the Inhabitants of Certain Groups of Islands in the Western Pacific," by Joseph Barnard Davis. Published by the Dutch Society of Sciences of Haarlem. *Natuurkundige Verhandelingen*. Deel XXIV. Haarlem, 1866.  
P. 9, Description of Skulls of Loyalty Islands; p. 24, Table of measurements; Plate 1, Hypsi-stenocephalic cranium of Biat, a woman of the Isle of Lifu, Loyalty Islands.
19. *Thesaurus Craniorum. Catalogue of the Skulls of the various Races of Man in the Collection of Joseph Barnard Davis, M.D., F.S.A., etc.* London, 1867.  
On pp. 308–9, a description of New Caledonian and Loyalty Island skulls; on p. 310, A figure of Biat's skull (a Loyalty Island woman); in Appendix B, p. 367, Skeletal measurements of Awita, a Loyalty Island man.
20. *France. Ministère de Marine. Dépôt des Cartes. Instructions nautiques de la Nouvelle-Calédonie*, par MM. C. M. Chambeiron et Bararé, suivie d'une Note sur les îles Loyalty par M. Jouan. Paris, 1869.
21. "Renseignements sur les îles Loyalty," par Lieut. S. Vollet. *Annales Hydrographiques*, 1<sup>er</sup> trim. Paris, 1872, pp. 53–56.  
Contains a few notes on the people, plantations, and roads.
22. "Forme et Grandeur des divers groupes de crânes néo-calédoniens d'après une collection inédite du musée de Caen comparés aux crânes parisiens, lapone et cafres," par le docteur Bertillon. *Revue d'Anthropologie*, I. Paris, 1872, pp. 250–288.  
Describes 20 Lifuan Crania 10m. and 10f. belonging to a collection made by Dr. E. Deplanche and deposited in the Museum of the Faculté des Sciences de Caen. The New Caledonians of the paper are Lifuan, Kanala and Puébos.
23. "Die Melanesischen Sprachen," von H. C. von der Gabelentz. *Zweite Abhandlung. Abhand. der phil.-hist. Classe der Konigl. Sächs. Gesells. d. Wissenschaften*. Leipzig, 1873.  
Deals with the Lifu Language on pp. 51–86 more fully than in No. 12.
24. *The Story of the Lifu Mission*, by S. Macfarlane. London, 1873.
25. "Note sur la Nouvelle-Calédonie," par L. Chambeiron. *Bulletin de la Soc. de Geog.* Paris, 1875.  
Notes on the structure of Lifu Island with a diagram showing the raised terraces.
26. *Crania Ethnica. Les Crânes des Races Humaines*, par MM. (J. L. A.) Quatrefages (de Bréau) et Ernest T. Hamy. Paris, 1882.  
Pp. 281–284, Crânes de Papous de l'Archipel Loyalty; p. 282 (Fig. 260), Crâne de Lifou (*Mus. d'Hist. Nat. Coll. Marzioux*, No. 4); Plate XXIV, Crâne de Néo-Calédonien de Kanala et d'un insulaire de Lifou (Iles Loyalty).

27. "Beiträge zur Kenntnis der Melanesischen, Mikronesischen und Papuanischen Sprachen, von Georg von der Gabelentz und Adolf Bernhard Meyer." *Abhandl. d. phil.-hist. Classe d. Konigl. Sachs. Gesells. d. Wissenschaften*, VIII. Leipzig, 1882.

The "Wörterbuch zur Sprachenvergleichung," pp. 397–490, contains Lifu words.

28. *Notes Grammaticales sur la langue de Lifu (Loyalty)*. D'après les manuscrits du P.F.P. Missionnaire mariste, par le P.A.C. Prêtre mariste. Paris, 1882.

29. "Anthropologische Ergebnisse einer Reise in der Südsee und dem Malayischen Archipel. Beschreibenden Catalog der auf dieser Reise gesammelten Gesichtsmasks von Völkertypen," von Dr. O. Finsch. *Zeitschrift für Ethnology*, 1883, Beilage.

P. 62, A description of Lifu People met on the S.E. Coast of New Guinea.

30. *Samoa a Hundred Years ago and long before*, by George Turner, LL.D. London, 1884.

Pp. 337–340, The Loyalty Islands (Ethnological Notes); pp. 338, 339, woodcuts of phylacteries and weapons; pp. 354–375, Vocabulary (Nengone, Lifu, New Caledonia).

31. *The Melanesian Languages*, by R. H. Codrington, D.D. Oxford, 1885.

Pp. 478–486, Grammar of Nengone; pp. 39–52, Vocabulary of Nengone. References are made in the Grammar to the Lifu of No. 28.

32. "A Comparison of the Dialects of East and West Polynesian, Malay, Malagasy and Australian," by the Rev. George Pratt. *Jour. and Proc. Royal Society of New South Wales*, 1888.

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33. "Usages, mœurs et coutumes des néo-calédoniens," par M. Glaumont. *Revue d'Ethnographie*, VII. Paris, 1889, pp. 73–141.

P. 135, An account of a Lifu Invasion of the Isle of Pines.

34. "Childbirth Customs of the Loyalty Islands, as related by a Mangaian Female Teacher," communicated by Rev. W. Wyatt Gill, LL.D. *Jour. Anthropol. Inst.*, xix, 1890, pp. 503–505.

35. *The Melanesians. Studies in the Anthropology and Folk-lore*, by R. H. Codrington, D.D. Oxford, 1891.

P. 324, Notice of Currency of Loyalty Islands.

36. "Les indigènes de Lifou (îles Loyauté) (en partie d'après les observations du Dr. François)," par J. Deniker. *Bulletin de la Soc. d'Anthropologie*, t. iv, 4<sup>e</sup> sér. Paris, 1893, pp. 791–804.

37. "Note on Chiefs' Language in Lifu and Ponape," by S. H. Ray. *Transactions of Ninth International Congress of Orientalists, held in London*, 1892. London, 1893, Vol. II, pp. 800–801.

38. "The Languages of the New Hebrides," by Sidney H. Ray. *Jour. and Proc. Royal Society of New South Wales*, xxii, 1893, pp. 101–167.

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39. "A Study of the Languages of Torres Straits," by Sidney H. Ray and Alfred C. Haddon, Part I. *Proc. Royal Irish Acad.*, 3 ser. II, Dublin, 1893, and Part II, 3 ser. IV, Dublin, 1897.

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Contains, p. 260, some general notes on the people of the Loyalty Islands.

41. *Reports of the Cambridge Anthropological Expedition to Torres Straits*, vol. III; Linguistics by Sidney H. Ray. Cambridge, 1907.

P. 168, Words in Torres Strait languages introduced from Lifu; pp. 187–189, Notes on Lifu influence in Saibai.

42. *The Polynesian Wanderings*, by William Churchill. Carnegie Institution of Washington, 1911.

On p. 84 is a table of Lifu phonetics compared with Polynesian. It is based only on seven words: the Lifu *a*, causative; *nyo*, tooth; *mei*, die; *mek*, eye; *mumu*, pitcher wasp; *niu* (sic), coconut palm; *puaka*, pig. These are compared with the Polynesian: *faka*, causative; *nifo*, tooth; *mate*, die; *mata*, eye; *mui*, to murmur; *niu*, coconut palm; and *puaka*, pig.

43. *The History of Melanesian Society*, by W. H. R. Rivers, F.R.S. Cambridge, 1914, Vol. II.

P. 233, Note on the Lifu word for the Melanesian *gamal* or club-house.

(b) *Books in the Lifu Language.*

1. *Tusi ne ihathi koi ange Thubadesithe me ange Dhadhine*, St. John's College, New Zealand. Printed at the College Press, 1853, 8 pp.

"Book of Teaching to Boys and Girls," translated by N. Hector from a New Zealand lesson book, with three hymns.

2. *Thith i Jesu Messia*. No imprint.

"Prayer of Jesus Messiah." On back, "Ini a mekune," etc., i.e., "I believe." Translated by N. Hector. Printed at St. John's College, New Zealand, 1853.

3. *A translation of the First Chapter of St. John's Gospel*, by William Nihill, about 1855. Printed at Nengone by S. M. Creagh, after the translator's death.

4. *Drei la nodhei khawe nine ihathi koue la nodhei atre, angaire troa khame koua chaha Akesie*, St. John's College. Printed at the Melanesian Press, 1858, 16 pp.

"This the prayers for teaching to the people, they to pray to one God." Instruction and private prayers for morning and evening.

5. *Drei la Eweka knapane nine ihathi koi ange Thubadesithe me ange Dhadhine*, St. John's College. Printed at the Melanesian Press, 24 pp., no date.

"This the thing first for teaching to Boys and Girls." A Scripture History, printed 1858.

6. *Drei la Eweka nine amamanc la thina i cha Haze*, 8 pp.

"This the thing for showing the Custom of one God." A short Life of Christ with Catechism. Printed at St. John's, 1858.

7. *Drei la maicha ka loi Jesu Keristo la Hupuna i Haze hna chini hane knei Maleko*. Melanesian Mission Press, St. John's College, Auckland, 1859, 69 pp.

"This the report good (of) Jesus Christ the Son of God was written by Mark." The Gospel of St. Mark translated by J. C. Patteson, afterwards Bishop of Melanesia.

8–15. Between 1863 and 1877 various portions of the Bible were translated by S. Macfarlane, J. Sleigh and S. M. Creagh. An account of these will be found in: *Historical Catalogue of the Printed Editions of Holy Scripture in the Library of the British and Foreign Bible Society*, by T. H. Darlow, M.A., and H. F. Moule, M.A. London, 1911, Vol. II, Part 3, pp. 1010–1011.

16. *Tusi Hmitöt, ene la Iaisinyikeu ka Hekö memine la Iaisinyikeu ka Hwyipize*, hna ujene koue la gene Dehu. British and Foreign Bible Society, London, 1900, 1143 pp.

"Book Holy, that is the Agreement Old and the Agreement New, turned to the Language Lifu." The Complete Bible. Revised and completed by S. M. Creagh and J. Sleigh.

17. *Nōjei Nyima*. London, no date, no pagination.

Published by Religious Tract Society before 1893. Contains 137 hymns.

18. *Tronge i Kerisiano ga la fene koue la hnengödrai*; hna cinyihane hnei Ioane Bunyan : nge hna ujene koue la gene Dehu hnei S. M. Creagh. Sini (i.e., Sydney), 1893, 154 pp.

"Journey of Christian from the Earth to Heaven," written by John Bunyan, and turned to the language Lifu by S. M. Creagh. *The Pilgrim's Progress.*

19. *Dei la tusi qdne la nōjei ate trou inine mate e nge nyine amamane la thina i Akitesie*. Noumea, 1903, 22 pp.

"This the book beginning the people to teach so that read and able to know the custom of God." A primer.

20. *Nōjei Nyima. Hymns translated into the Lifuan Language*. London, London Missionary Society, 1905, 351 pp.

Contains 353 hymns (the last twelve in French) and fourteen anthems (one in French).

#### DESCRIPTION OF PLATES.

##### PLATE XII.

Fig. 1. Lifu Phylacteries. (Turner's *Samoa*, p. 338.)

Fig. 2. Chief's Hat. (Lambert's *Mœurs*, p. 33.)

Fig. 3. Spear Thrower. The Lifu *sep*. (Lambert, p. 157.)

Fig. 4. Clubs. The central figure is the Lifu *haao*. (Lambert, p. 157.)

Fig. 5. Sling. (Lambert, p. 185.)

##### PLATE XIII.

Fig. 1. Double Canoe. (Lambert, p. 57.)

Fig. 2. Various Types of Houses. (Lambert, p. 6.)

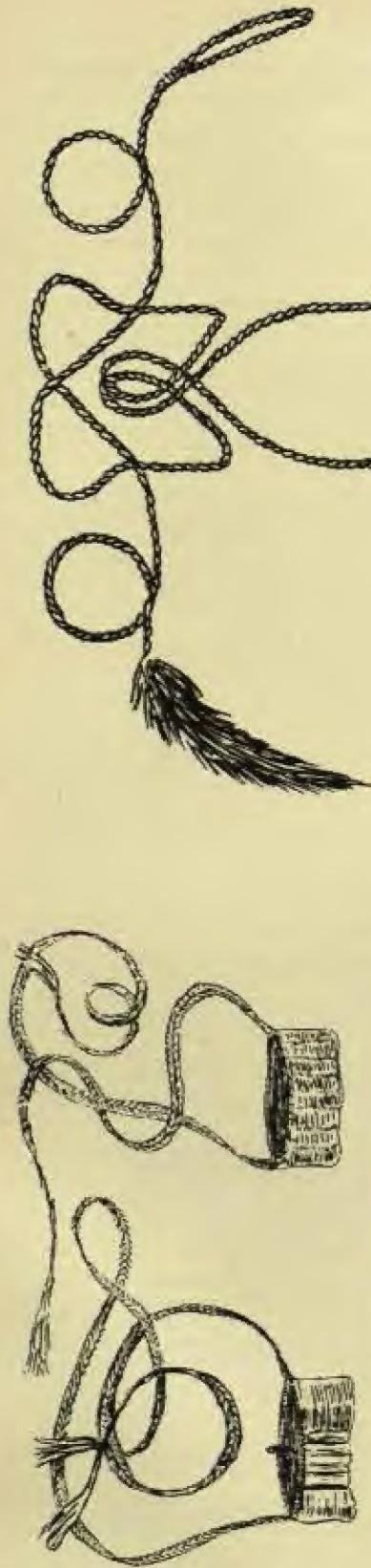
##### PLATE XIV.

Fig. 1. Finial of House Post. New Caledonia. (Lambert, p. 77.)

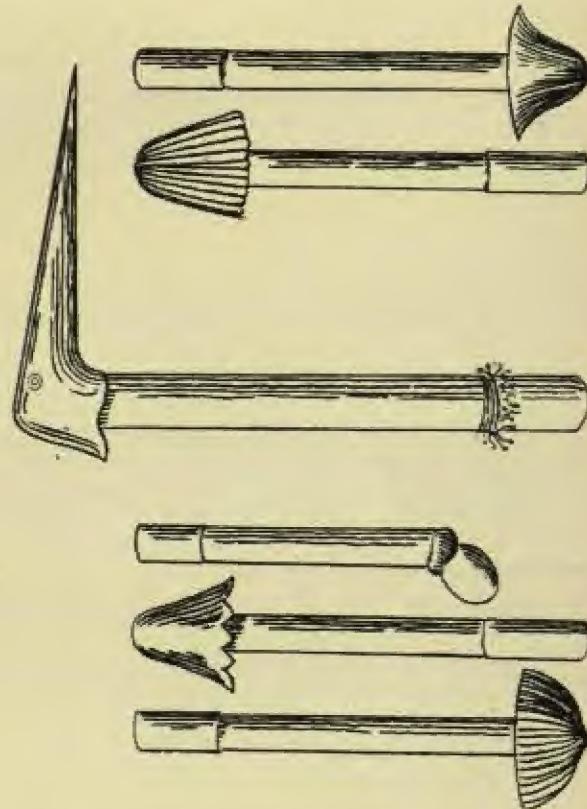
Fig. 2. Finial of House Post. New Caledonia. (Lambert, p. 121.)

Fig. 3. Adze. (Lambert, p. 171.)

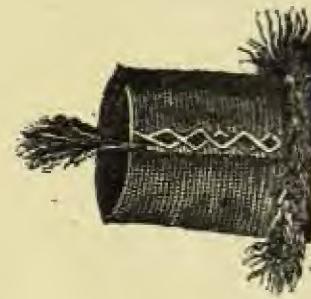
NOTE.—Lambert's figures refer more particularly to New Caledonia.



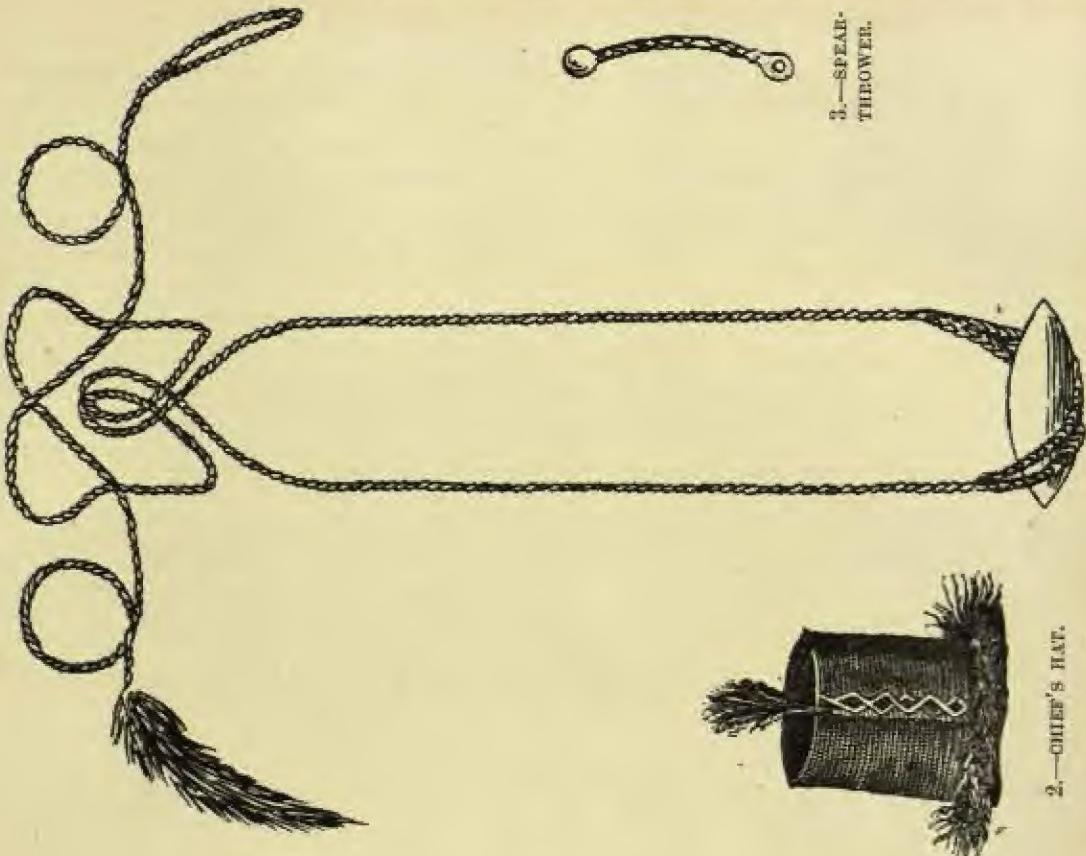
1.—LIFU PHYLACTERIES.



4.—CLUBS.



2.—CHIEF'S HAT.

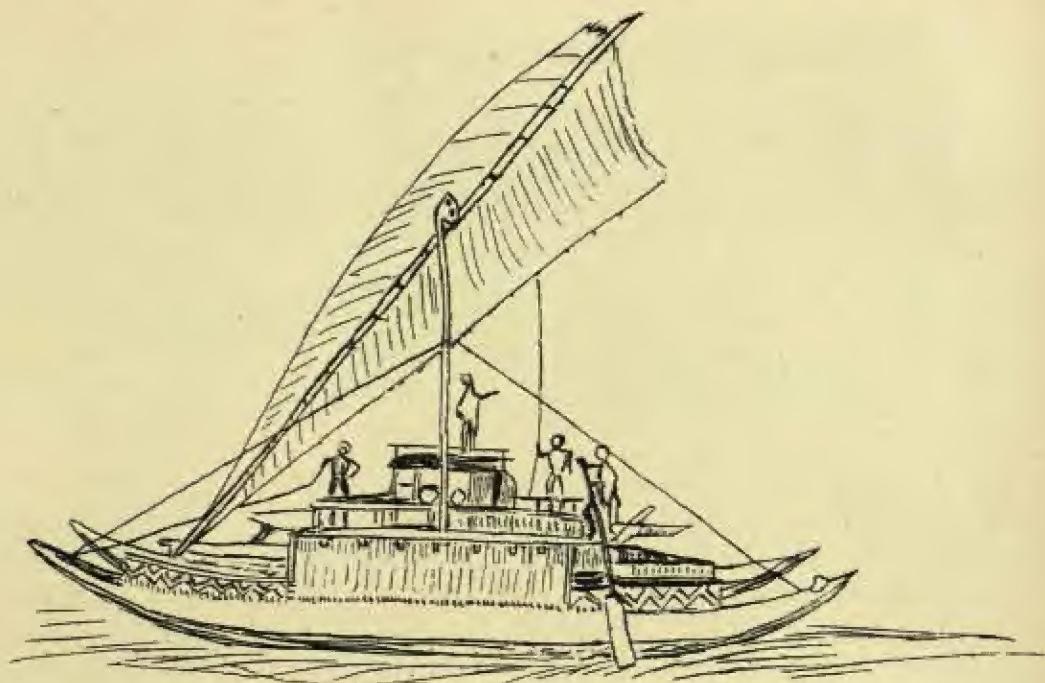


3.—SPEAR-  
THROWER.

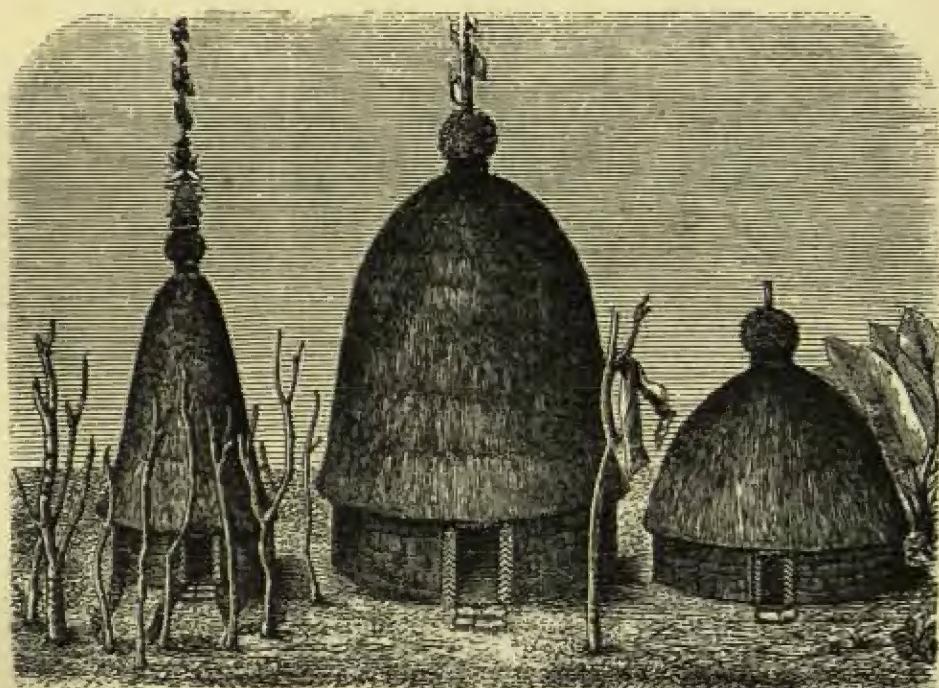
5.—SLING.

(Fig. 1 after Turner. Figs. 2-5 after Lambert.)  
THE PEOPLE AND LANGUAGE OF LIFU.





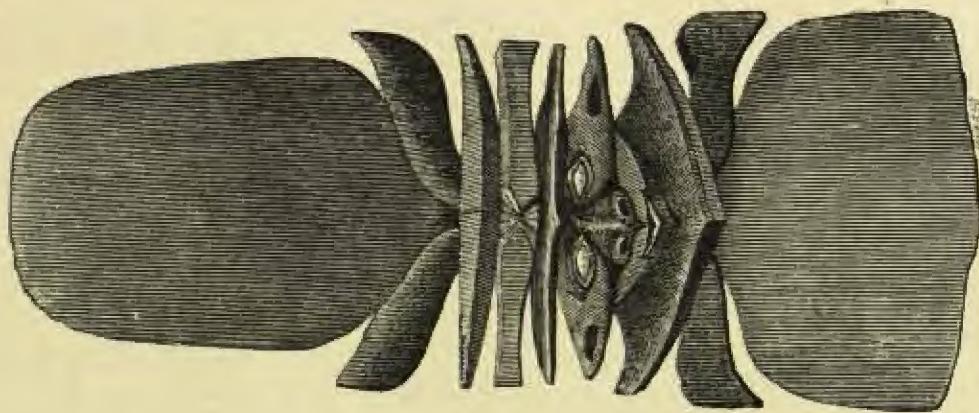
1.—DOUBLE CANOE. (After Lambert.)



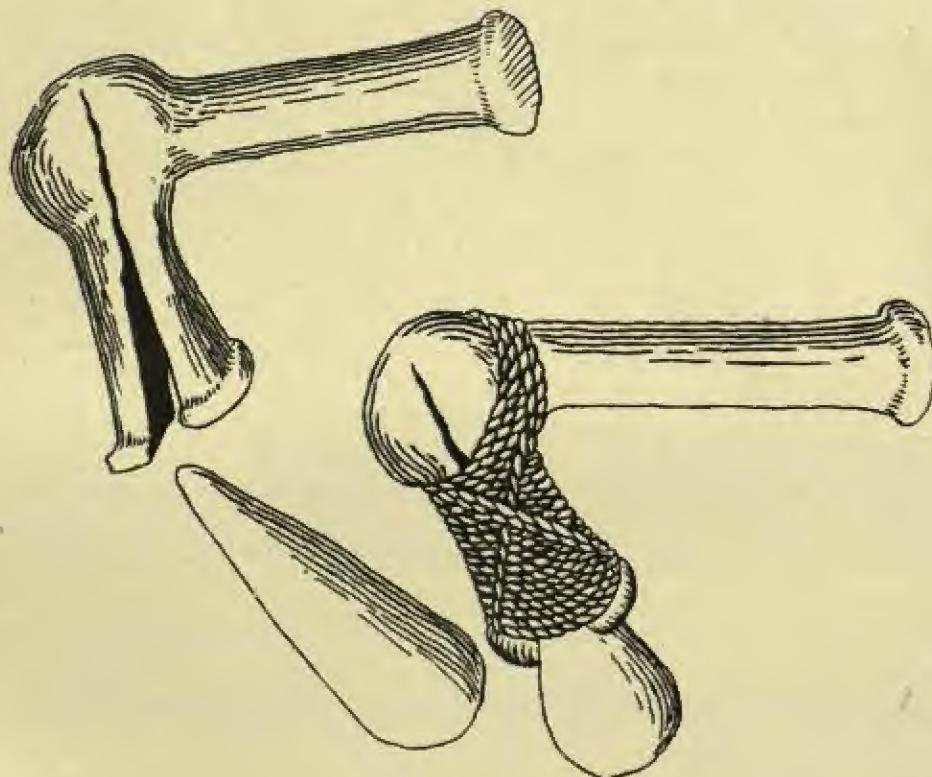
2.—VARIOUS TYPES OF HOUSES. (After Lambert.)

THE PEOPLE AND LANGUAGE OF LIFU.



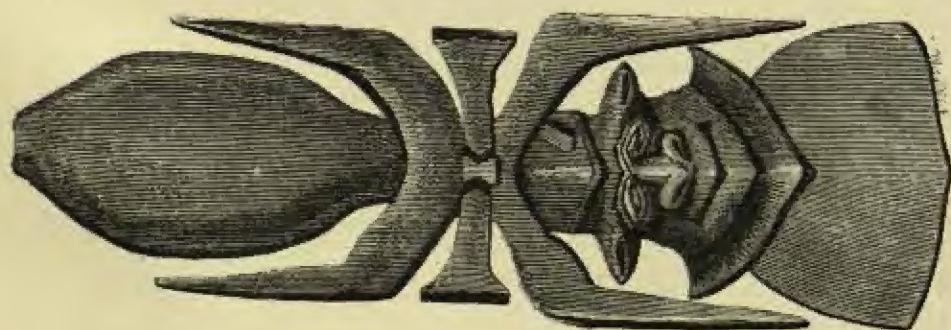


2.—FINIAL OF HOUSE POST.  
(After Lambert.)



3.—AXE.  
(After Lambert.)

THE PEOPLE AND LANGUAGE OF LITU,



1.—FINIAL OF HOUSE POST.  
(After Lambert.)



## STUDIES IN PRIMITIVE LOOMS.

By H. LING ROTH.

## PART III.

## 6. INDONESIAN LOOMS.

THE Indonesian loom belongs to the Pacific type of loom, two forms of which, the American and Ainu, have already been described in Part I. There appear to be three forms of loom in Indonesia, taking the area in a wide sense. They are the Dusun and Iban (Sea Dyak) loom, the Ilanun and Igorot transition loom, and the Cambodia and Malay loom. They all merge more or less into one another, and are therefore to be taken rather as various stages in the development of the loom than as perfectly distinct forms.

The following table gives dimensions and capacity of five such looms examined by me :—

Name of Tribe from whom obtained.	Museum where now placed.	Length, Beam to Beam, inclusive.	Width of Web.	No. of Warp per—	No. of Picks per—	Back Strap.	Material.	Heddle Leashes, continuous.	Repeat of Lay of Warp.	Form of Weft Carrier.
Dusun	British...	In. 26½ Cm. 67.12	In. 30.5 Cm. 76.45	In. 38 Cm. 15	In. 28 Cm. 11	Coarse cloth	Cotton	Spiral ...	Twos ...	Ab 1.
Iban	" ...	10½ 27.11½	28	110 43.4	37 14.7	Raw hide	"	" ...	" ...	Missing.
" ...	Horni- man	23½ 60	9½ 24.5	— —	17 6.6	Rotan mat	"	" ...	Sixea ...	Ab 1.
" ...	Liverpool	30 76	6½ 16.5	118 74	40 16	Missing	Silk ...	Alternate over- lapping	Eights ...	Missing.
" ...	Royal Scottish	22½ 57	5½ 13.3	— —	— —	"	"	"	Twenties	Ba.

The most primitive of these is the Dusun and Iban loom (Figs. 122 and 123). It consists of a warp beam attached to two upright posts, a breast beam attached to a back strap, several laze rods, a shed stick, one "single" heddle, a beater-in, a temple, and a spool. The warp is continuous, and the weaver sits on the floor. The breast beam is almost in the weaver's lap, whence the warp rises at an angle of about 35° up towards the warp beam (Fig. 123). As there is only a "single"

heddle there are no treadles, nor does there appear to be any special loom frame, and the loom can be set up wherever there are a couple of suitable posts and a

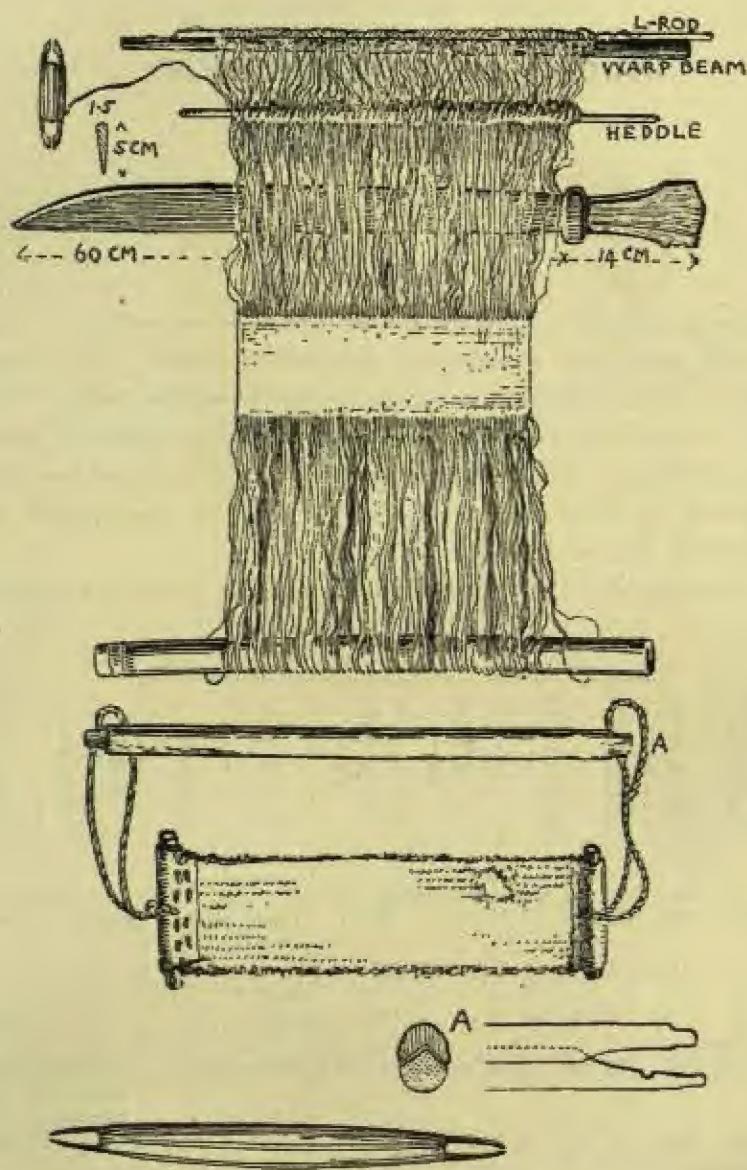
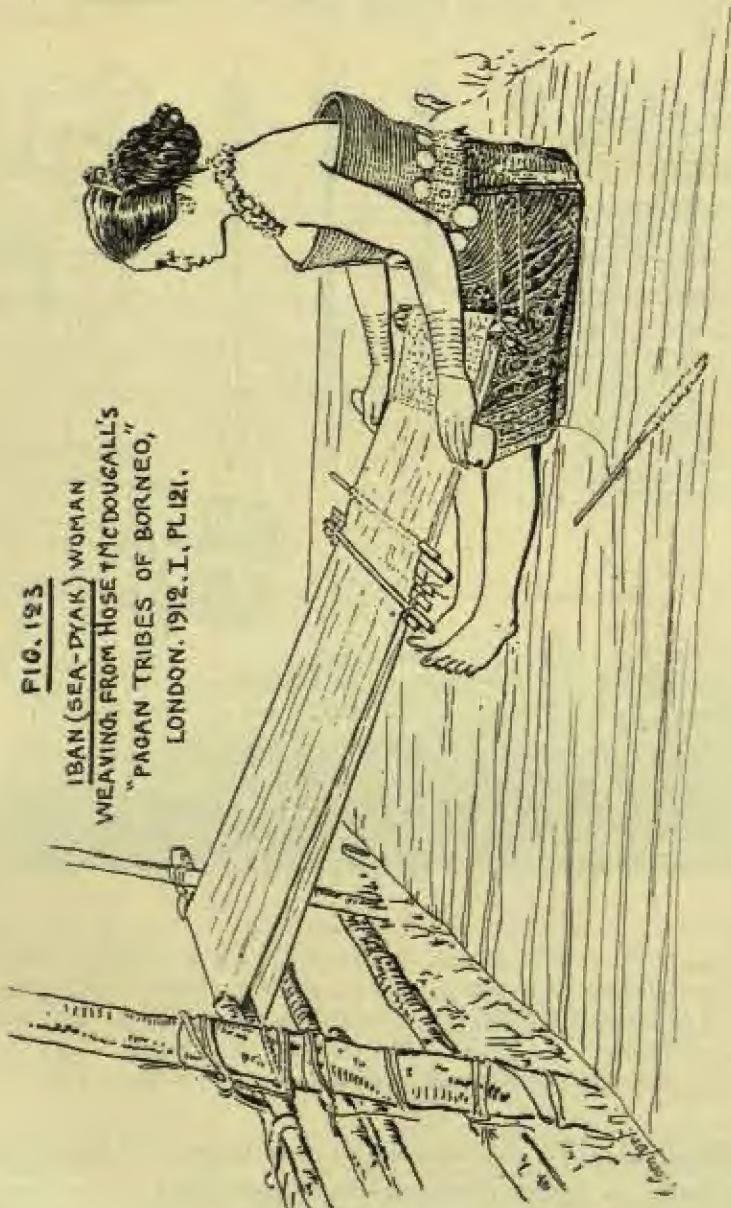


FIG. 192. DUSUN LOOM, BORNEO. BRIT. MUS.

suitable floor or platform. According to Hose and McDougall,<sup>1</sup> "The weaving is done only by the women, though the men make the machinery employed by them."

<sup>1</sup> *The Pagan Tribes of Borneo*, Lond., 1912, I, p. 221.



Most of the webs commence with two heading rods. The Horniman Museum specimen has an extra rod over and parallel with the heddle rod (Fig. 124), evidently to be used as a handle or raiser. In most of the looms the warp and weft are both double ("sisters"). The British Museum specimen is provided with a temple<sup>1</sup>

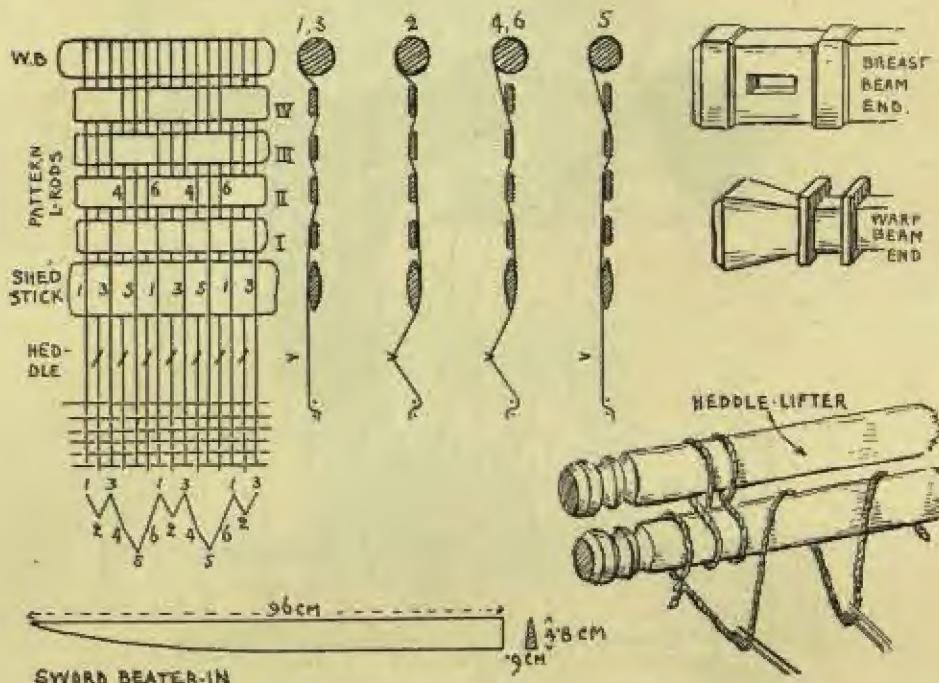


FIG. 124. IBAN LOOM & DETAILS. HORNIMAN MUSEUM

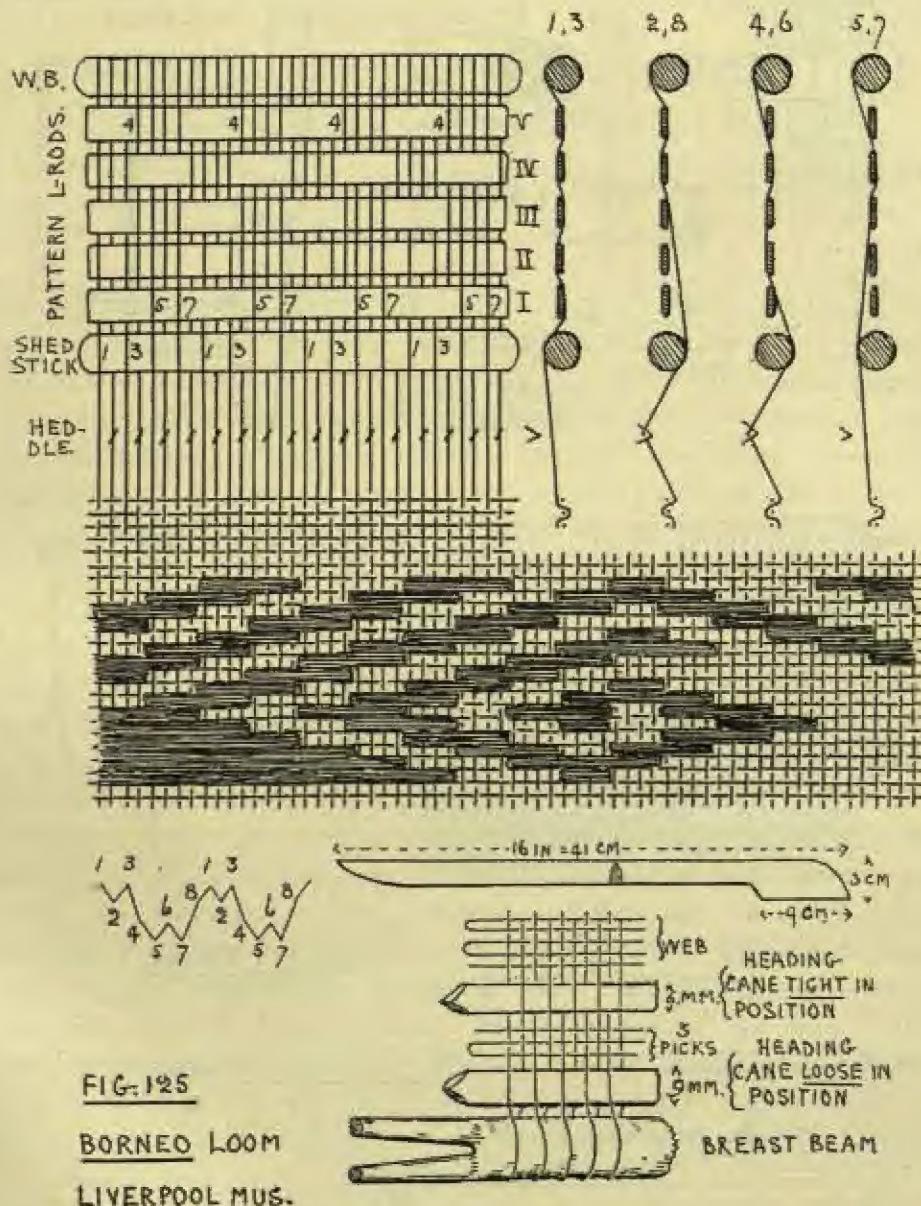
and has two warp beams; it has an insignificant brocade pattern woven-in on the wrong side, as well as a warp pattern scheme extending the whole width of the cloth, thus:—

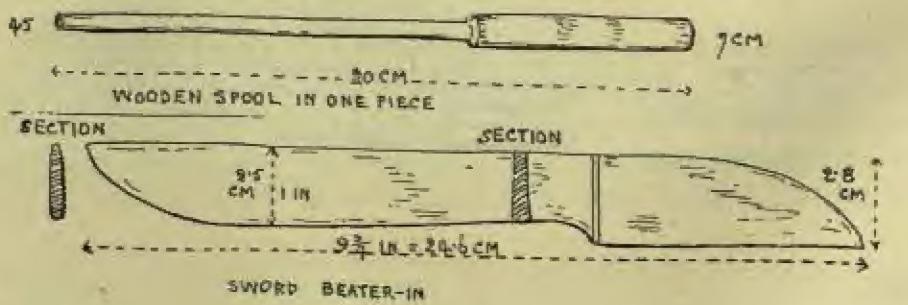
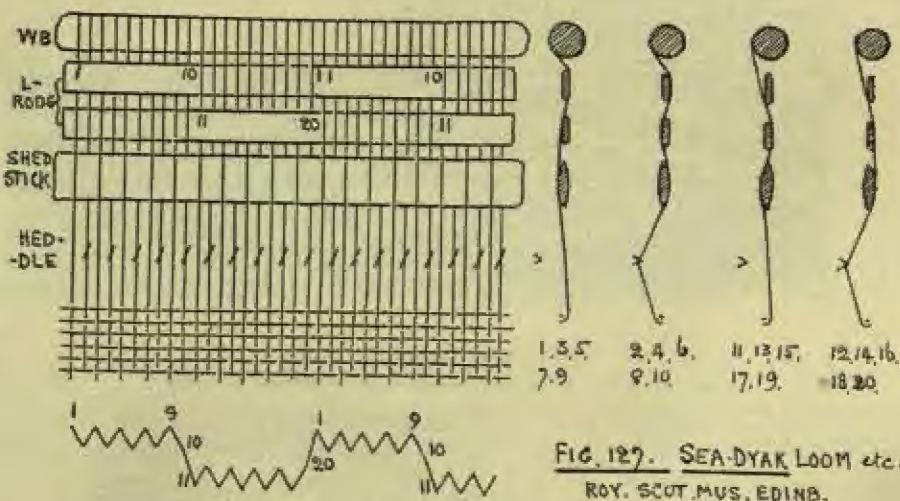
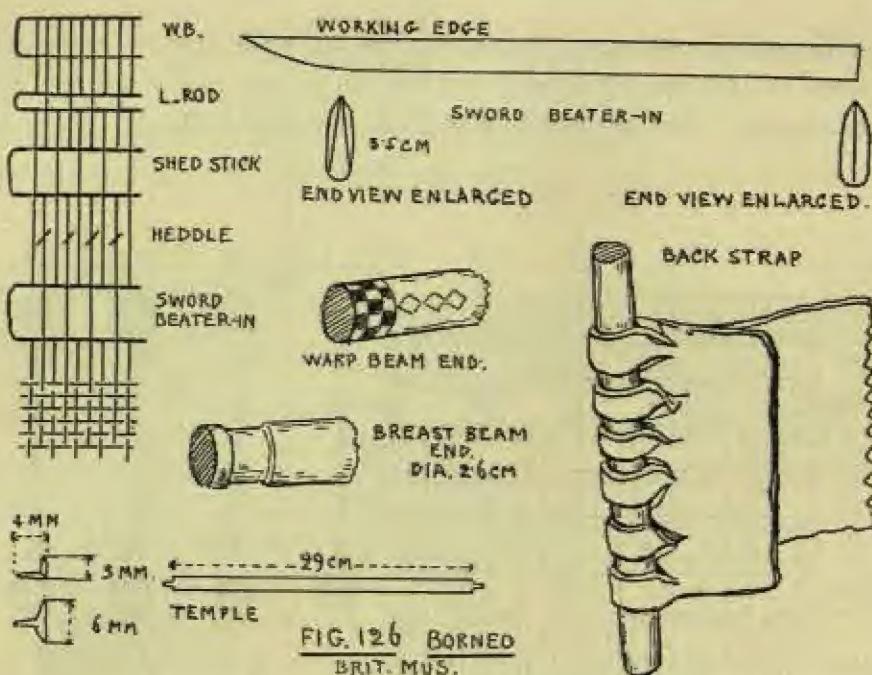
Selvedge.	mm.	Red ... 57	L blue 4	Yellow... 4.5	Gr. yell. 5	Dk. blue ... 2.5
Dark blue ... 2.5		Gr. yell. 3.5	Yellow... 4.5	L blue 6	Red ... 59	Selvedge
Light blue ... 2.5		Yellow... 4.5	Gr. yell. 3.5	Dk. blue 14	Gr. yell. 3.5	Total, 277 mm.
Yellow ... 2.5		L blue 4	Red ... 58	L blue 6	Yellow... 2.5	(= 105 ins.)
Green-yellow 3.5		Dk. blue 14	Gr. yell. 3.5	Yellow... 4	L blue 2.5	

The coloured warp is a characteristic of these looms. In the specimen in the Liverpool Museum the figured pattern is woven-in similarly on the wrong side and follows the laying of the warp, which repeats in eights as shown in Fig. 125, nearest to where the work has been left unfinished. There is another figure pattern further away (not shown), which does not agree with this warp-laying. The warp at the

<sup>1</sup> A loom from Sermata Island, between Timor and Timor-laut, in the British Museum, is provided with a similar temple but quite flat, 12 mm. broad and 4 mm. depth of point.

selvedge begins with red and follows on with blue and white, then red in the centre for a width of 14.5 cm. (5½ inches), and then white, blue, yellow and red to the opposite selvedge. The weft is gold, blue, white, and green yarn.





A similar loom (Fig. 125A) is found in Sumatra, whence H. O. Forbes brought one from Moeara Doeä in 1873, now in the British Museum. The particulars are :

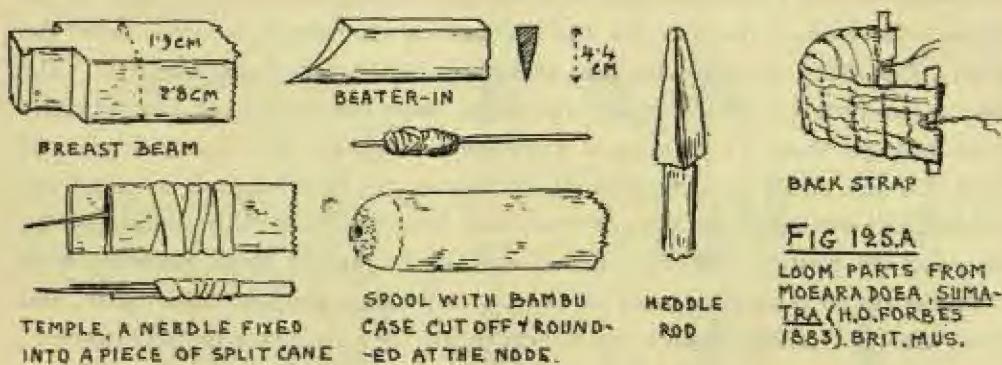


FIG 125A

LOOM PARTS FROM  
MOEARA DOEÄ, SUMA-  
TRA (H.O.FORBES  
1883). BRIT.MUS.

length, beam to beam inclusive,  $32\frac{1}{2}$  inches (or 82.5 cm.); width of web, 17 inches (or 43 cm.); 136 warp to the inch (or 53.5 to the cm.); 32 picks to the inch (or 12.6 to the cm.). Warp and weft twisted; leashes continuous, alternate, overlapping. Breast beam rectangular in section; warp beam of wood  $1\frac{1}{2}$  inches (or 4.5 cm.) in diameter. There is no reed. The temple consists of a flat piece of cane with needle inserted in a split at both ends, and reminds one of the similar American tool (Figs. 36 and 37.) The warp is coloured in bands of red, yellow, and blue, a further pattern on blue ground being made in the centre,  $4\frac{1}{4}$  by 5 inches (or 12 by 12.7 cm.), by means of white, red, crimson, and yellow yarns, the ends of which are cut off on the surface when done with. There are two heddles, one for the general weave and one for making the border. The back strap is composed of a piece of bark, 15 by 5 inches (or 38 by 12.7 cm.), padded on the inside by cotton wool sewn into a bag of coarse cotton. The ends of the strap are strengthened by pieces of cane to which the beam ends are attached.

This form of loom is also found in the Philippine Islands, among the Ifugaos, Tingiaus, etc.,<sup>1</sup> in Assam, in parts of Burma among the Karens, and also in Tibet, but somewhat modified. Hose and McDougall<sup>2</sup> tell us as regards Borneo that weaving "is the only craft in which Ibans [Sea Dyaks] excel all other peoples," although my necessarily more limited experience leads me to the conclusion that Ilanun weaving far excels that of the Iban. Hose and McDougall continue: "Their methods [i.e., those of the Iban] are similar to those of the Malay and have probably been learnt from them." Here, too, I must differ, for as we shall see directly, the loom used by the Malays proper is a more advanced article than that used by the Ibans, and if the Ibans had learnt from the Malays I think we are more likely to have found among them an imperfect or

<sup>1</sup> See Worcester, *Philippine Jour. Sci.*, I, No. 8.

<sup>2</sup> *Op cit.*, I, p. 220.

degenerate form of loom, rather than a more primitive one than that used by the Malays. In the same way that the house building of the Kenyahs, and the padi cultivation of the Klemantans, are both inferior to these arts as practised by the Kayans, from whom the Kenyahs and Klemantans are thought to have learnt the arts.<sup>1</sup> The Ibans probably brought their loom with them from Sumatra. The Dusuns are probably of Philippine origin, and hence the survival of this primitive loom amongst them. They possess a considerable amount of Chinese blood, and from this one would be inclined to think they might have adopted an improved method of weaving, in the same way as they have improved their cultivation by adopting the plough. But the Chinese who settled among them probably took Dusun wives to themselves, and as weaving is women's work in these parts, and there were no Chinese women to show them better, the primitive loom has survived; and as a corollary, but as a side issue here, ploughing being men's work the Dusun were taught by the Chinese men how to plough, and that tool has been retained.

An observation of T. Chapman, quoted by me,<sup>2</sup> runs as follows: "At present there are only two kinds of looms: the *tumpoh*, at which the weaver sits on the floor and uses his hands only; and the *tenjak*, at which the weaver sits on a bench and uses hands and feet, the latter working the treadles. The cloths are much better and closer woven on the *tumpoh* looms. Both looms are picturesquely clumsy and the work slow." Here Chapman is referring to the Iban loom and to the Malay loom, which, as he indicates, show wide divergence from each other. The Iban may, no doubt, have learnt from the Malay in occasionally adopting the latter's loom, and to say that what they know of weaving they have learnt from the Malay can only refer to what they have learnt of weaving on Malay looms, while the superior work produced on their own looms shows they are not yet conversant with the methods of the later intruder.

The Bhotiyas loom, Darjeeling (Fig. 128), shows some advance on the Iban and Dusun loom in being provided with three single heddles instead of one. Apart from this and the heavy composite beater-in, it is similar to the Borneo specimens, but is also provided with a cloth beam, or second warp beam, according to one's point of view. The warp, which is spun wool, is only partly continuous and is arranged as follows: No. 1 warp starting from the cloth- or No. 2 warp-beam, goes its round over the breast beam across the three heddles, three shed sticks, laze-red and warp beam until it reaches the second warp beam from the opposite direction, when it starts the return journey, getting back as No. 4 warp. The same laying holds good for No. 2 warp, which returns as No. 3. The length of the loom, i.e., breast beam to first warp beam inclusive, is 9 feet 10 inches (or 3 m.), and the width of the cloth is 17 inches (or 43 cm.). The shed sticks are bevel-edged, about

<sup>1</sup> Hose and McDougall, II, p. 244.

<sup>2</sup> *Natives of Sarawak*, II, p. 30.

1½ inches (or 3.8 cm.) wide and 27 inches (or 69 cm.) long, the middle one being slightly curved like a boomerang. The laze rod consists of a piece of cane about  $\frac{1}{2}$  inch (or 12.7 mm.) in diameter, round which every warp is wound once

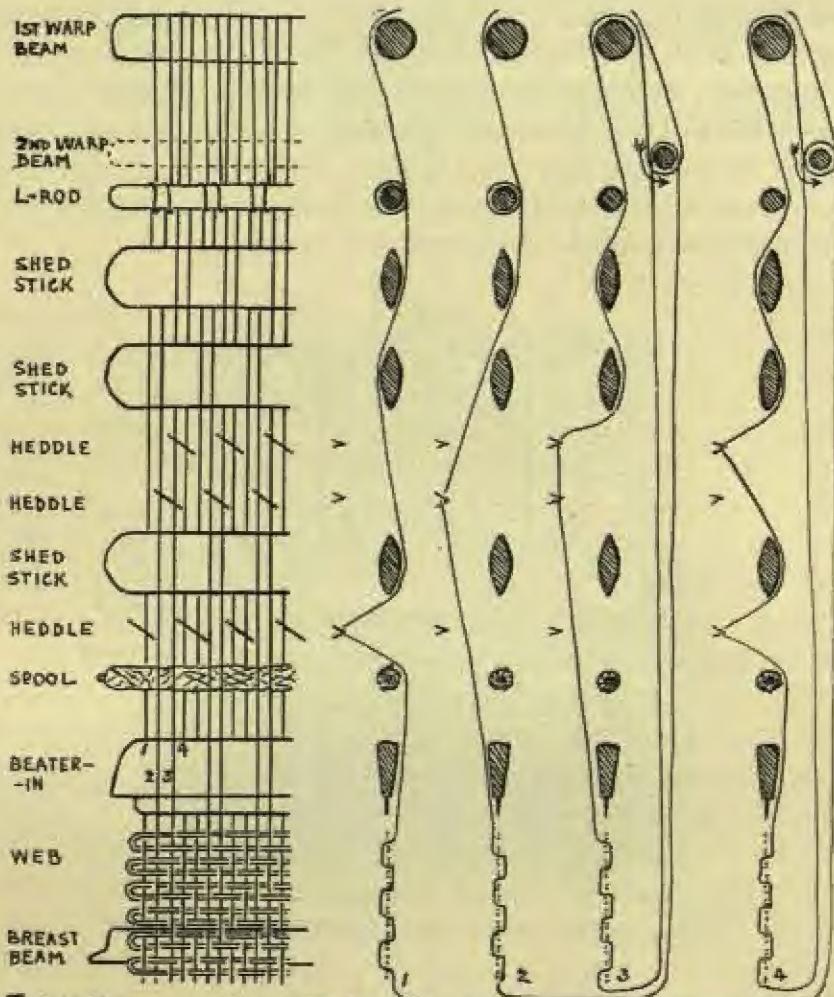


FIG. 128. BHOTIYA (INDIAN) LOOM  
BANKFIELD MUSEUM.

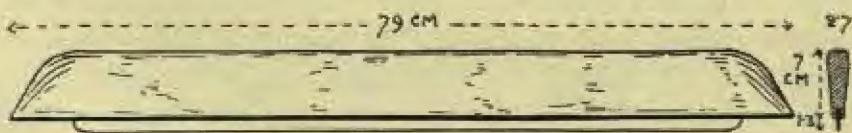


FIG. 129. BHOTIYA SWORD BEATER-IN. BANKFIELD MUSEUM

so that the rod can be rolled backwards and forwards, and still keep the threads in position. There are three spools of the Aa form about  $\frac{3}{8}$  inch (or 9.5 mm.) in diam. and 24 inches (or 61 cm.) long, and when completely filled the ends are

likewise covered.<sup>1</sup> The weft is double ("sisters") and the warp is single. The heddle lesshes, which are spiral, naturally require to raise two warp threads in every leash to make the pattern. The beater-in (Fig. 129) consists of a heavy piece of wood 31 inches (or 79 cm.) long by 3½ inches (or 8.2 cm.) wide, very thick at the back and tapering to the front, where it is provided with a piece of wrought iron (*not* hoop iron), let in lengthwise and protruding about  $\frac{1}{2}$  inch (or 12.7 mm.) beyond the wood. This blade, like the back itself, is wedge-shaped in section. The heaviness of this tool may be necessary as a very coarse wool has to be beaten in. The edge of the iron, the back of the beater-in, and both edges of all three shed sticks, are deeply serrated from friction in the working. The temple is cut out of a thin strip of cane shouldered and pointed at both ends.

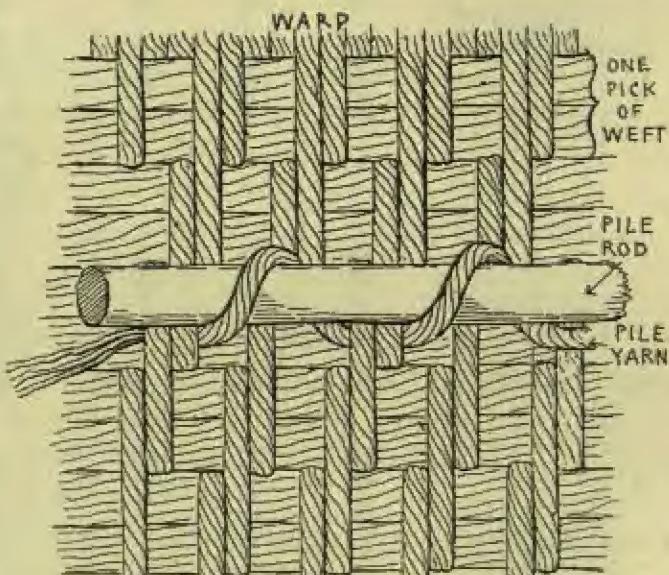
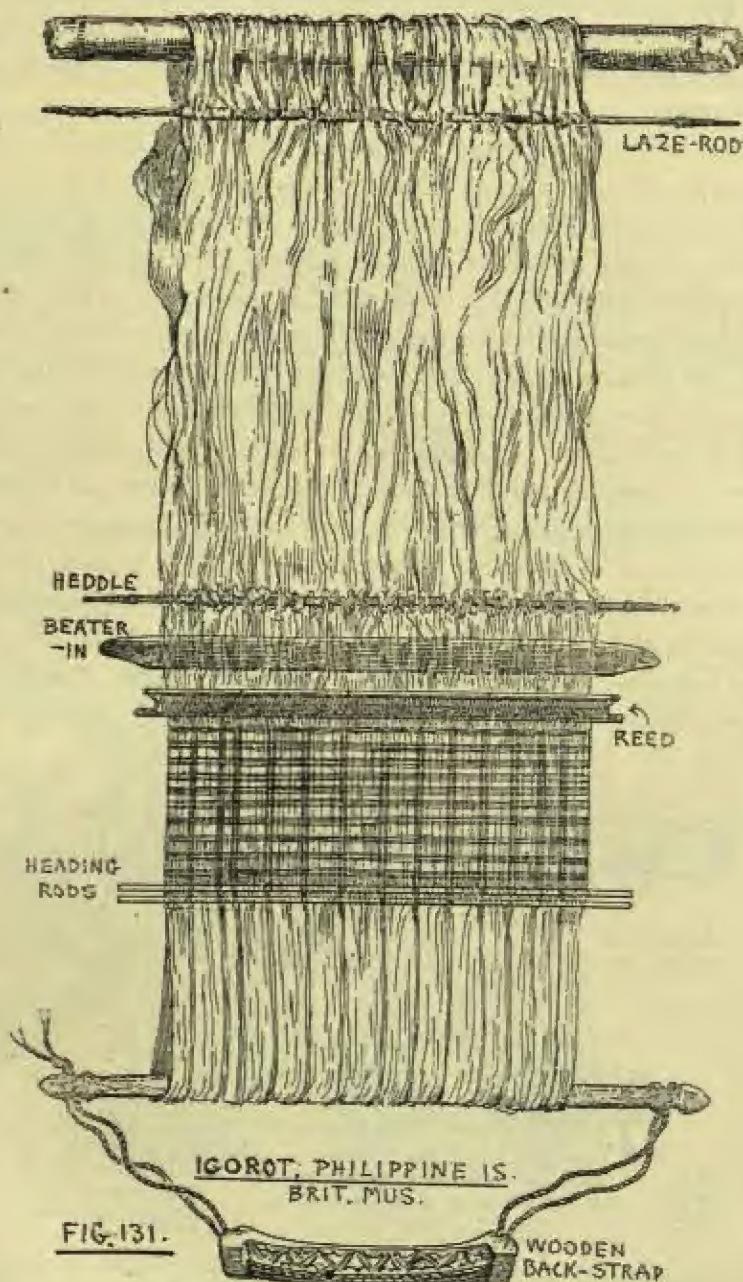


FIG. 130. PILE MAKING ARRANGEMENT ON A  
BHOTIYA (INDIAN) LOOM. BANKFIELD MUSEUM

Another Bhotiya loom, which I saw at work at the Coronation Exhibition in London in 1910, is now likewise in Bankfield Museum, and is fitted up for making rugs or pile cloth. It is provided with a ball of weft instead of a spool of weft. In other respects the two looms are similar. The length from beam to beam inclusive was about 18 feet (about 5.5 m.), with continuous warp, and the angle of rise of the warp from the weaver was somewhat under  $30^{\circ}$ . The method of inserting the pile is shown in Fig. 130. It may be likened to that of a heddle with very thick three-ply lesshes, which gets overtaken by the weaving and is left two picks behind, after which the rod is withdrawn and the upstanding loops cut along the whole length,

<sup>1</sup> A like form of spool is found on the Sermata loom already mentioned. Note, p. 326.

with a resultant pile. The rug on this loom was about 3 feet (or 1 m.) long, and several are made at intervals on one warp laying and beaming. When I pur-

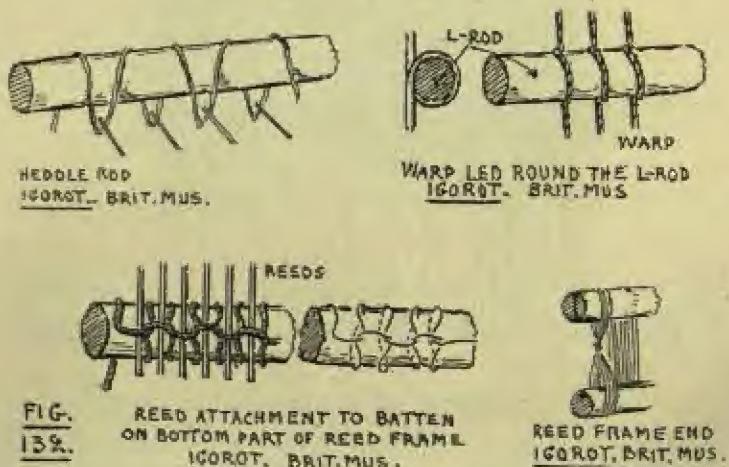


chased this specimen the heavy beater-in was not included in the sale, as I was told it was an heirloom without which the weaveress could not work, and a replica

was of no use to her as it did not and could not possess the qualities of the original. I had to content myself with the replica, and concluded it to be a case of weavers' ritual.

The Bhotiya loom is evidently the same as that described by Moorcroft and Trebeck as being in use among the Northern Ladakis.<sup>1</sup> The Igorot and Ilanun looms are a step in advance of the Iban and Dusun and Bhotiya looms in so far that they possess reeds.

An Igorot loom in the British Museum, obtained from Mount Isarog, Luzon, by Jagor (see Fig. 131), consists of a breast beam, two heading rods, one "single" heddle, a beater-in, two laze rods, a warp beam, four spools, and a wooden back strap or yoke. Length from beam to beam inclusive 42 inches (or 1.07 m.) ; width of web 15 inches (or 38 cm.). The warp, which is continuous, consists of a fine non-spun fibre (? *musa*), and so does the weft. There are 62 picks to the inch (or 24.4 to the cm.), and 28 warp (sisters) to the inch (or 11 to the cm.). In the web there is a wider space between every two warp threads than between every two picks, the picks being all equidistant. As in the Bhotiya and Ilanun looms the warp is wound round one of the laze rods (see Figs. 128 and 134). The pattern, an Oxford shirting design, is obtained by means of dark blue warp and weft at regular intervals. The spools are thin pieces of cane of varying lengths, viz., 38.5, 42.5, 44.5 and 52 cm. long respectively, that is to say they extend for the full width of the web and over; three of them have form Ab1 and one approximating form Ab3. The heddle rod and laze rod ends are curiously pointed, like a round spear head. The heddle leashes are continuous, alternate, overlapping, and consist of strong doubled fibre.

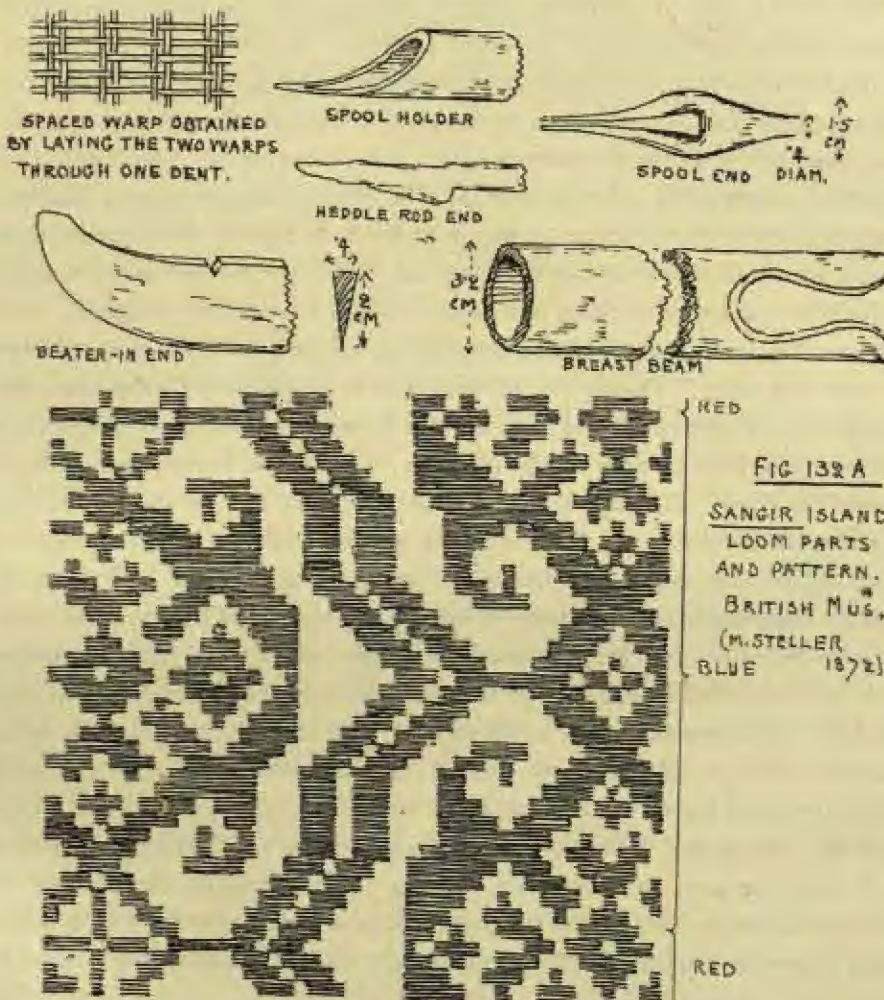


The reed frame consists of two pieces of cane—a top piece and a bottom piece; the teeth are of fine cane whose ends fit into a groove in the bottom piece, where

<sup>1</sup> *Travels in the Himalayan Provinces of Hindustan . . . 1819–1825*, London, 1841. ii, pp. 72–74.

they are fastened in position by means of some strongly twisted fibre which passes between every one of them, i.e. through the dents, and round one or two slips of cane, placed on either side along the groove. The upper ends of the canes fit loosely without any tying up into the upper part of the frame, which has been split in two to receive them.

A loom from Sangir island (Fig. 132A) between Celebes and Mindanao, obtained by the British Museum in 1872 (M. Steller), is similar to the Igorot loom. The



particulars are as follow : length, beam to beam inclusive, 27 inches (or 68.5 cm.); width of web,  $8\frac{1}{2}$  inches (or 22 cm.); 42 warp to the inch (or 16.5 to the cm.); 40 picks to the inch (or 15.7 to the em.). The whole fabric is of non-spun fibre. The warp is made to keep in pairs by passing two of them through one dent. A piece of non-spun plaited fibre about 5 mm. broad appears to have been used as a back strap.

There are two heddles with non-spun, continuous, alternate overlapping leases. Non-spun leases are rare. There is an elaborate brocaded pattern woven through the web in broad bands of blue and red alternately, the bands being of varying width of  $3\frac{1}{4}$  inches (or 8.9 cm.). Besides the fine small reed fixed top and bottom with fairly stiff canes and quite rigid, there is also a small light beater-in. There are three spools, one each for the red, blue and buff weft, and as in the Ancient Peruvian loom (Fig. 40) and the Okale loom (Plate II) and the Borneo loom (Fig. 125), this loom is provided with pattern lace rods.

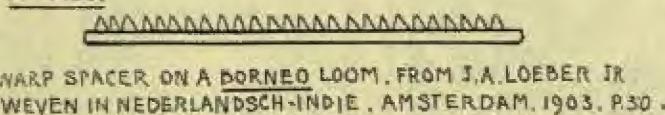
The curious fact about these looms is that in addition to the reed they are furnished with a wooden sword beater-in as well.<sup>1</sup> Regarding this coexistence of reed and beater-in on one and the same loom, Meyer and Richter<sup>2</sup> say that "strictly speaking where the loom has been enriched by a reed the beater-in is superfluous, in the same way as our looms possess a reed, but no beater-in. The latter has been retained as a survival in order to give the reed efficient support (*festen Rueckhalt zu geben*) and to serve at the same time as a beater-in as before, which means that the beater-in was partly at least put to a new use." They say also that we must have more definite information as to the local use of the beater-in, on looms provided with a reed, in various parts of the Archipelago before we can adopt a definite conclusion on the point. Failing the advent of such information I offer the following explanation:—The canes of the reed are not fastened to the upper bar of the reed frame (and the same absence of top fastening occurs in the Ilanun loom about to be described) and as a result when hard pressed these canes come away from the top bar, which necessitates the retention of the wooden beater-in with the object of its performing its work as before. But owing to the presence of the reed the beater-in cannot do the whole of the work it did before, and instead of assisting the reed and being thus put to a new use, the reed takes some of its work from the beater-in. When the canes of the reed are fixed top and bottom they have sufficient rigidity to beat-in, and seem then also made stouter, and the wooden beater-in being no longer necessary gets gradually discarded. The coexistence of these two tools on one and the same loom therefore indicates a transition state, in which the primary use of the reed appears to be that of a warp spacer, before the discovery was made that it could be used as a beater-in as well. I do not think the absence of top fastenings on the reed is a sign of decadence, for the reason that the tool is not likely to have come into use full-blown, but by degrees and as a warp spacer form at first.

<sup>1</sup> C. M. Pleyte (*De Inlandsche Nijverheid in West Java*, Batavia, 1912, pl. viii) figures a loom from Zuid-Banten, with both reed and sword (beater-in). The details are not very clear, but if the reed is as flimsy as it looks the surviving presence of the more primitive beater-in is accounted for.

<sup>2</sup> *Webgerüst aus dem Ostindischen Archipel mit besonderer Ruecksicht auf Gorontalo in Nord-Celebes*, Ethnographische Miszellen, Dresden Museum, ii, No. 6, p. 47.

As a matter of fact, J. A. Loeber<sup>1</sup> says: "In Borneo there is to be found a very primitive form of this reed. It looks like a rake without the handle and betrays its purpose without any doubt." He tells us specimens from South and East Borneo can be seen in the Ethnographical Museum, Leiden, and one from Borneo in the Grassi Museum, Leipzig. He gives an illustration of such a warp spacer which is reproduced in Fig. 133 as nearly as possible, but his illustration is far too minute—

FIG. 133.



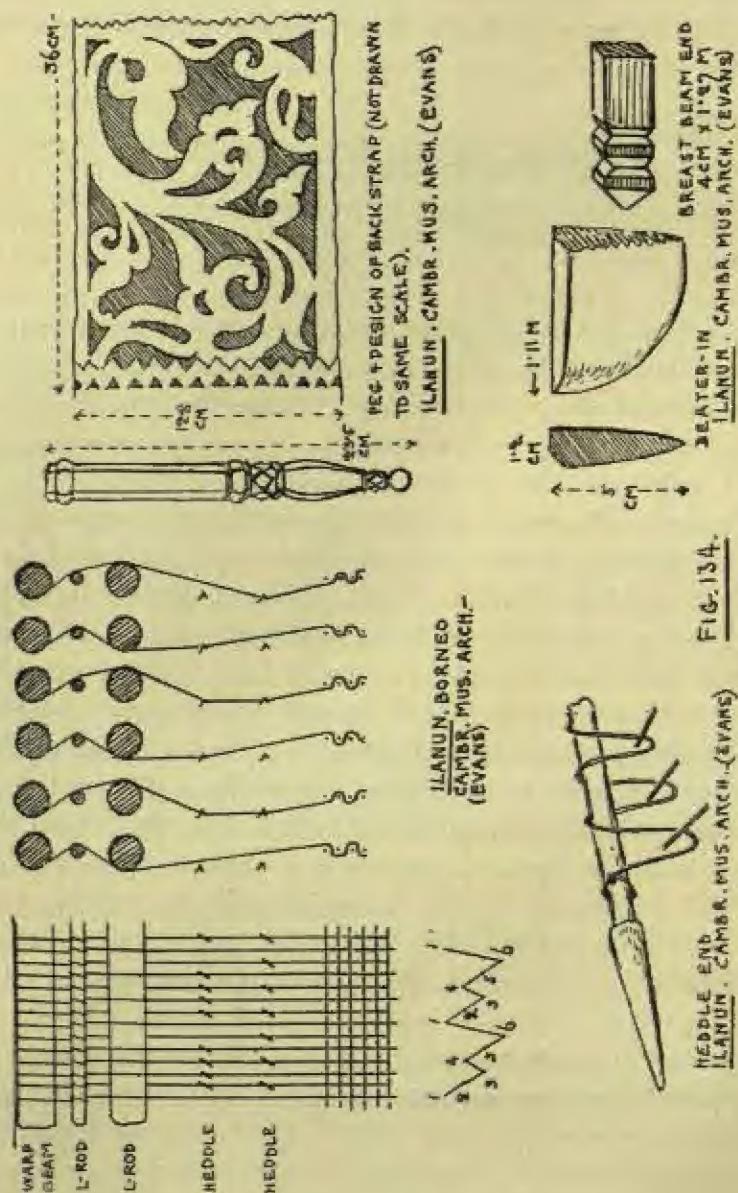
it is only 23 mm. long—for us to do more than to agree that it does represent a warp spacer, and to add that probably several warp threads pass through one dent, instead of every warp thread having a dent to itself. Whether the dents are produced by cutting notches in the stick or by the insertion of pegs is not clear from the illustration, but as Loeber says it looks like a rake, pegs must be inferred.

In the Cambridge Museum of Archaeology and Ethnology there is an Ibanun loom from the Tampassuk district of British North Borneo, brought home in 1915 by Ivor H. N. Evans (Figs. 134, 135 and 136). It consists of breast beam, reed, two "single" heddles, two laze rods, warp beam, back strap, beater-in, and seven spools. Length, beam to beam inclusive, 25 inches (or 64 cm.); width of web, 33 $\frac{1}{2}$  inches (or 86 cm.); 42 warp to the inch (or 16.5 to the cm.), all single; 42 picks to the inch (or 16.5 to the cm.), all treble ("sisters"). The breast beam is 50 inches (or 1.27 m.) long and more or less square, 4 by 3.8 cm.; the warp beam is 5 cm. square. The heddle rod and leashes are similar to those on the Igorot loom (Fig. 132). One laze rod is 3 cm. in diameter, the other is 1.4 cm. in diameter. The back strap (Fig. 134) consists of a piece of raw hide on the outside; the inside or concave surface is covered with red cotton cloth and this again is covered with a piece of green hide with a pattern cut out of it like fretwork.

There is one large transverse spool and six small spools (Fig. 136) for carrying the embroidery weft in mauve, orange, yellow, red, green, and white. The warp laying repeats itself after every sixth thread. As the embroidery runs for every two and every four threads of warp (equals 6 threads) there is a correspondence between the warp laying and the brocading, from which one may conclude that the laying is intended as a guide to the brocading.

<sup>1</sup> *Het Weven in Nederlandsch-Indie*. Bull. Kolonial Mus. te Haarlem, No. 29, December 1903, p. 30.

The reed is similar in principle to the Igorot reed, that is, the canes are not fastened at the top and are very fine, and perhaps on account of their fineness, or to compensate to some extent for their want of top-fastening, or perhaps even as



a step towards such fastening, the canes are loosely looped together for a distance of 3 cm. at one end and 7 cm. at the other end (Fig. 135). Altogether the reed frame is more elaborate in construction than the Igorot one, while the loose looping at the

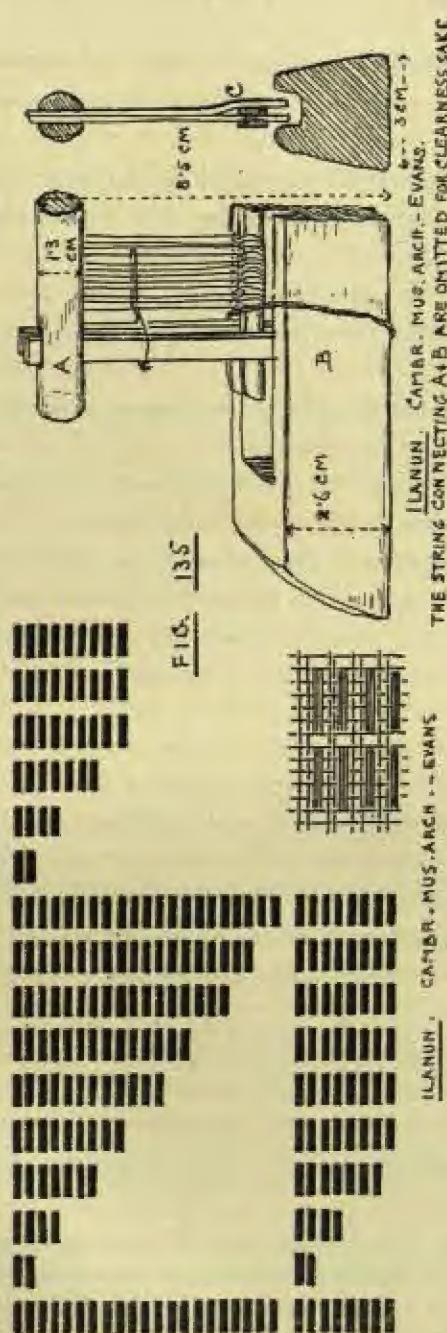


FIG. 135.

ILANUN. CAMBR. MUS. ARCH. - EVANS.  
THE STRING CONNECTING A & B ARE OMITTED FOR CLEARNESS SAKE.

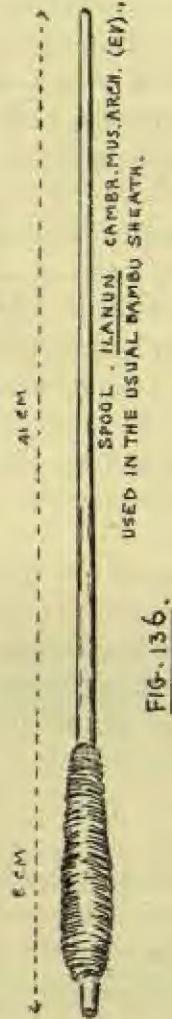


FIG. 136.



ends is a step in advance. With this we approach a completion of the chain of evidence of the evolution of the reed, for the next step is the making of a complete frame in which the canes are fastened top and bottom. To summarize it we have :—

- (a) The Borneo warp spacer—a pegged rod allowing two or more warp threads to pass through every dent, with which the old sword beater-in is used quite independently.
- (b) The pegged rod prevents entanglement, thereby assisting the progress of the work. This advantage is increased by having a dent for every warp, which in its turn necessitates finer pegs or canes, so that the increased number shall still fit into the same limited space. A finer yarn with more warps to the inch likewise necessitates finer pegs or canes.
- (c) The finer canes are found to be too pliable, and require a top support, which is given by means of a groove in an upper bar.
- (d) This step is followed by the perception that, in addition to its original function of a warp spacer, the now incipient reed frame could be made to act as a beater-in, with advantage to the evenness and closeness of the web. To do this the fine reeds must be fastened in the top bar as well as in the lower one, and as the frame becomes more rigid it adopts the secondary function, and the sword beater-in is ultimately discarded.

The *raddle*, or, as the Scotch call it, the *evener*, used as a warp spacer in laying out the warp, will probably have had a similar development to that of the reed.

The development thus described practically overcomes the difficulty referred to long ago by Tylor<sup>1</sup> of not being able to follow changes of one and the same people at different times, and satisfies the canon laid down by Karl Pearson<sup>2</sup>—that steps of sequence should be drawn from the usage of one tribe or group of tribes—for we see this evolution going on at this day among more or less allied peoples in one more or less restricted area.

The African herring-bone stick (Fig. 98) may have been evolved out of the old Roman spaced slot-rod found at Gurob, Egypt, which Flinders Petrie conjectures to have been a warp spacer. The distance in time from Egypt to Borneo is considerable, and if this Roman warp spacer has migrated eastwards it has had not only ample

<sup>1</sup> *Researches into the Early History of Mankind*, 2nd ed., London, 1878, p. 159: "It happens unfortunately that but little evidence as to the early history of civilization is to be got by direct observation—that is, by contrasting the condition of a low race at different times, so as to see whether its culture has altered in the meanwhile."

<sup>2</sup> *Grammar of Science*, 2nd ed., London, p. 359: "To find sequences of fact—a growth of evolution expressible by a scientific law—we must follow the changes of one tribe or people at a time." His objection does not affect the question of the evolution of the shuttle either, for we find, as is the case with the reed, all its successive steps in a very circumscribed area.

time for its travels, but also ample time in which to alter or improve itself. That such alterations do take place we have plenty of evidence, and for our purposes we may cite as an example the case of the Santa Cruz loom. This, as I will show later on, in travelling from Indonesia to its present limit, has traversed almost as many miles as the Roman warp spacer must have traversed if it did go from Egypt to Indonesia. The Santa Cruz loom, in a probably much shorter space of time, has considerably altered and, to some extent, improved itself, and we should expect some alteration in the Roman warp spacer. But the possible alteration from sawn slots to pegs is not much to find after a lapse of nearly two thousand years of travel, and as we see the evolution of the reed now going on in the East there is no need to search far afield for its origin. The fact that we have before us all the stages of this evolution in a restricted area makes it quite likely that the Borneo pegged stick warp spacer (Fig. 133) is indigenous to Indonesia, and this view is in accordance with the general evidence which tends to show that one birthplace of weaving was in this part of the world.<sup>1</sup>

An incomplete model of a Bugis loom in the Cambridge Museum of Archaeology and Ethnology, brought home by W. W. Skeat, belongs to the same form as that of the Igorot and Ilanum looms, being supplied with a "single" heddle and a reed. But the remarkable points are the method by which the warp is fixed on the breast beam and the curious grooving of the warp beam. The breast beam is made of two longitudinal blocks (Fig. 137), one being tongued and the other grooved longitudinally, which when fitted together hold the warp very securely. It cannot be revolved like a roller breast beam, because in section the two parts together are

<sup>1</sup> Having used the words *sley* and *batten* (Part II, bottom of p. 144) without defining them, I have been asked by a vigilant student to explain their meaning. Mill managers, loom tuners and weavers, use the word *sley* and *reed* as synonymous terms for that collection of reed canes (or reed wires in modern looms) which in their frame act as warp spacers and beaters-in, the workpeople generally using the word *sley* in preference to the word *reed*. They call the upper horizontal part of the reed frame the *hand-tree*, but Fox (*The Mechanism of Weaving*, London, 1911, p. 467) calls both the upper and lower part of this frame the *rib*, while others call these parts *battens*. Fox also gives the name *sley* to the shuttle box beam attached on power looms to the lower part of the frame (*op. cit.*, p. 326, Fig. 169). Definitions from practical men are not always alike. The beating-in of the *welt* "is performed by what is termed the *lay*, which carries the reed dividing the warp threads. The *lay* performs two distinct functions, the beating up of the *weft* and carrying the *shuttle*" (Thos. R. Ashenhurst, *A Practical Treatise on Weaving and Dyeing*, Huddersfield, 1893, 5th ed.). "The batten consists of two flat pieces of wood into which grooves are cut for the reed or *sley*, which is fixed in by iron or wooden pins, and is suspended from the capes of the loom" (Alf. Barlow, *The Principles of Weaving*, London, 1878, p. 62). Formerly the whole reed frame, together with the two supporting side pieces and cross top piece, was known collectively as the *batten*; nowadays it is known as the *going part*. The word *batten* marked on the reed (Fig. 113) is used in the ordinary sense of a thin strip of wood, and in this instance to indicate that this portion of the frame is not the same as the heavy horizontal piece below it. The word *side-battens* mentioned on p. 144 is used also in the sense of a strip of wood. Being here on the subject of reeds, I may point out that on p. 147, line 4 from top, the indication to Fig. 115 should be to Fig. 117.

rectangular, that is to say, it has flat sides like a board, and can only be turned over from side to side so that the tension of the warp is not delicately adjusted, and must

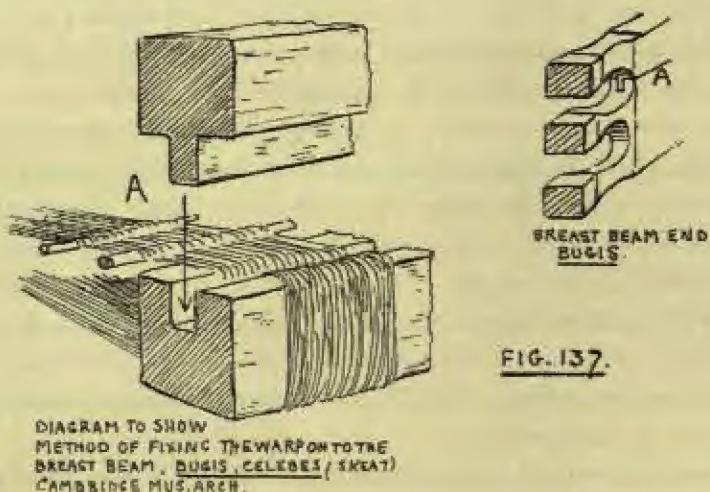
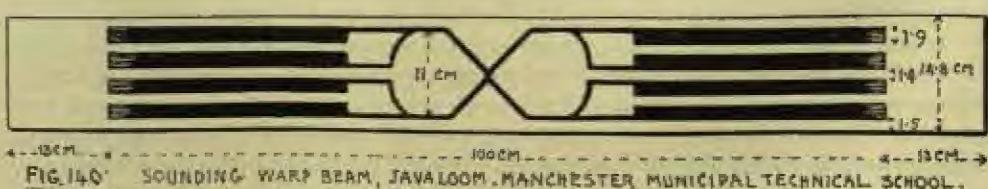
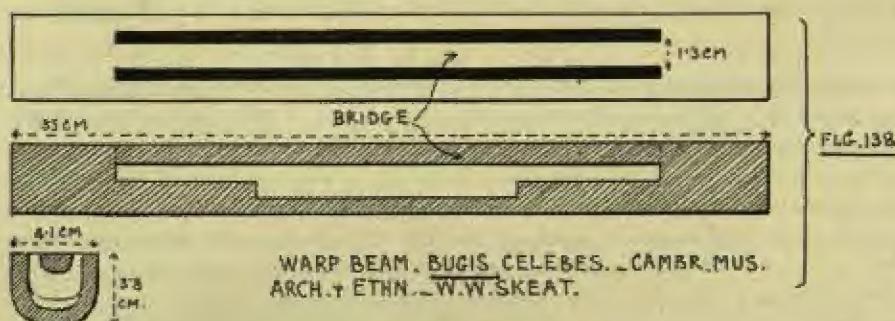


FIG. 137.

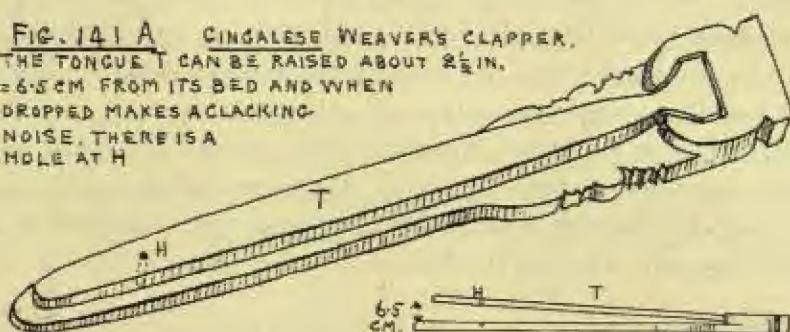
DIAGRAM TO SHOW  
METHOD OF FIXING THE WARP BEAM TO THE  
BREAST BEAM. BUGIS, CELEBES (SKEAT)  
CAMBRIDGE MUS. ARCH.

in most cases be too taut or too slack. This flat-sidedness constitutes a transition towards the Malay and Cambodian loom, which we shall have to deal with directly. In principle it is somewhat similar to the very primitive African vertical mat loom beams (Fig. 50, etc.), which are likewise not revolvable, but have a groove cut length-

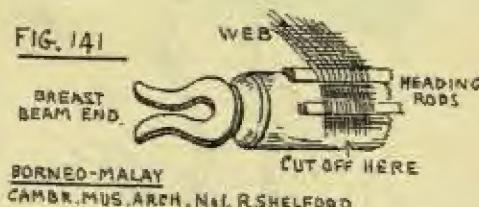
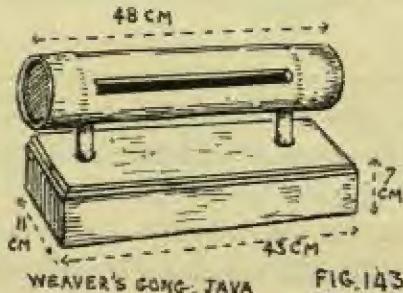
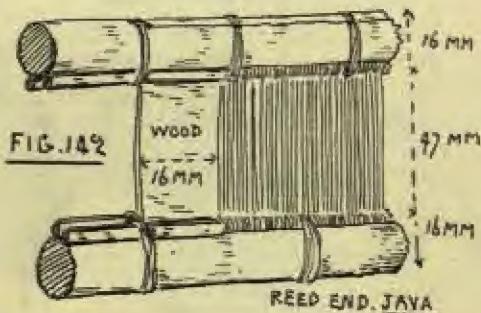


wise, into which the warp is pressed and held down tightly by a rod pressed and tied down on top to prevent it from slipping. Meyer and Richter<sup>1</sup> illustrate a similar breast beam from Gorontales in Celebes.

FIG. 141 A CINGALESE WEAVER'S CLAPPER.  
THE TONGUE T CAN BE RAISED ABOUT 2½ IN.  
≈ 6.5 CM FROM ITS BED AND WHEN  
DROPPED MAKES A CLACKING  
NOISE. THERE IS A  
HOLE AT H

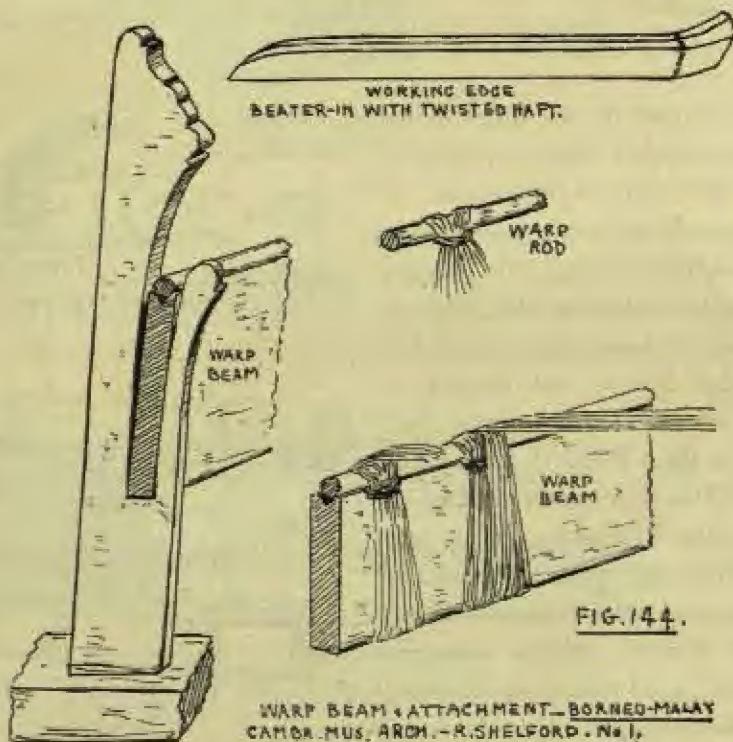


The warp beam of the Bugis model differs also in another respect from warp beams met with outside this region. It has two longitudinal grooves which join under the separating piece left, forming it into a longitudinal bridge (Fig. 138). A more advanced form of this grooving is illustrated by Meyer and Richter as belonging to the Celebes loom just referred to, in their Plate II, No. 22 (see Fig. 139). In the Gorontales illustration the resultant two bridges are cut up into four tongues enlarged at the loose end, and the authors speak of the whole as a *Laerm Vorrichtung* (signal-, rattle- arrangement). A still more complicated form of this warp beam exists on a Javanese loom in the Manchester Municipal School of Technology (Fig. 140). It has six loose tongues, which vibrate with every movement on the loom, and strike against the back, making a rattling noise. I think the arrangement has something to do with the ritual of weaving, for Mr. W. Myers, M.Sc., lecturer in the textile testing

FIG. 141FIG. 142FIG. 143

<sup>1</sup> *Op. cit.*, Pl. II, No. 13.

department, informs me that when the loom was received the donor (whose name has been unfortunately forgotten) explained that every time a pick was made the Javanese weaver struck a bambu gong (Fig. 143), placed alongside, a sort of swishing blow with the sword beater-in. There are signs of wear on top of the gong, the striking of which can have nothing to do with the weaving, and which I would suggest is an act to propitiate or warn some spirit. In connection with this sounding warp beam there is an instrument bound up with some loom parts from Ceylon, in the British Museum, which may possibly likewise have something to do with weavers' magic (Fig. 141A). The tongue, which lies flat on its base, can be raised  $2\frac{1}{2}$  inches (or 6 cm.) at the loose end, and makes a loud clacking noise when dropped. The hole H may have served to hold a knob.



We now come to the Malay, Javanese, and Cambodian forms, a class of loom provided with a reed, and whose characteristic is the flat warp beam already referred to, combined with the rudiments of a loom frame.

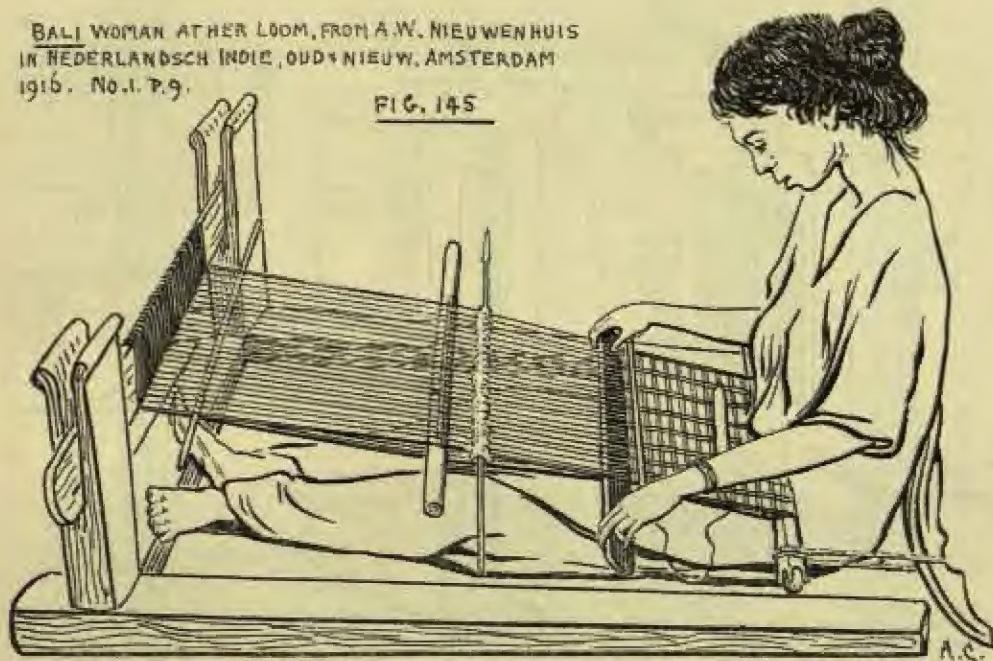
The model of one of these is in the Cambridge Museum of Archaeology and Ethnology. It was brought home by the late R. Shelford, who called it a "floor loom." It has the warp board fitted into a slot in the front edge of each of a couple of posts (Fig. 144). The warp board is provided with one "single" heddle and a shuttle of form Bb1. The canes in the reed frame are fastened both top and bottom, and not at bottom only. The sword beater-in has a bent haft, somewhat like the

handle of a kris.<sup>1</sup> The back strap is of wood. With the presence of the back strap and the single heddle the necessity for any loom frame has not yet become apparent, although the two warp posts form a beginning.

A similar form of loom is illustrated in Fig. 145, copied from that of a Bali weaver by Nieuwenhuis, in the periodical *Nederlandsh-Indie*. In this the warp board posts or supports are slotted from the top down the middle and not at the front edge. In another model (Fig. 146), also brought home by Shelford, the warp beam fits into a pair of posts swung from the top of the loom frame, which look as though they had originally been on the ground, as shown in Fig. 144. In a Pahang loom model given me by Leonard Wray, and at present in Bankfield Museum, these hanging

BALI WOMAN AT HER LOOM, FROM A.W. NIEUWENHUIS  
IN NEDERLANDSCH INDIE, OUD & NIEUW, AMSTERDAM  
1916. NO. I. P. 9.

FIG. 145



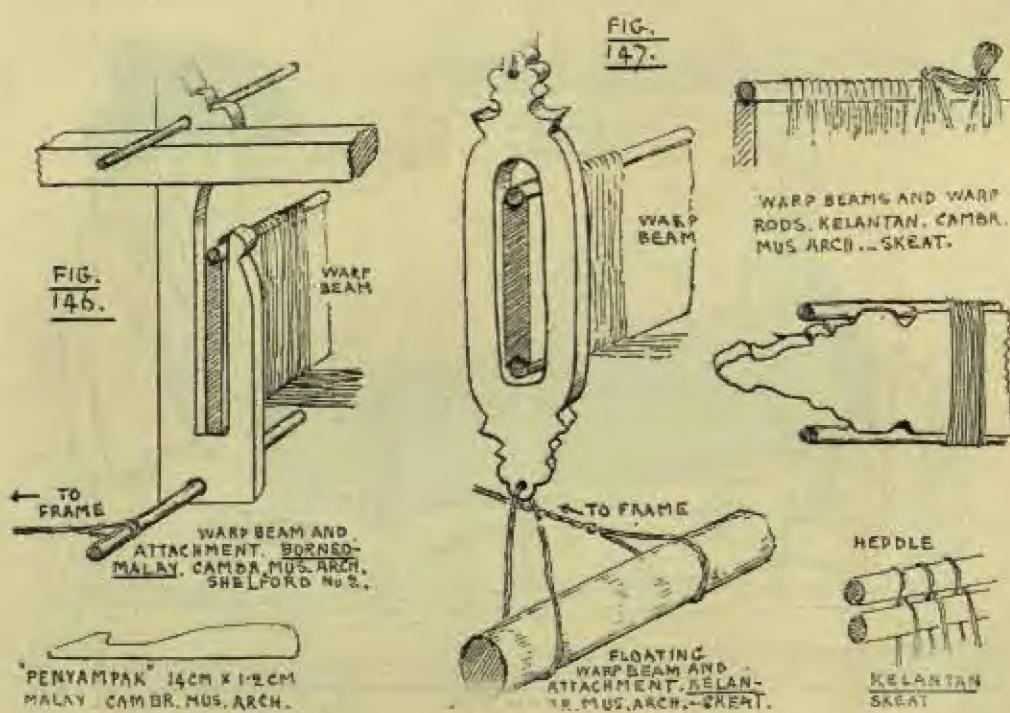
supports have become elongated arms provided with oblong openings at their ends (Fig. 148) into which the warp board fits. This arrangement looks very like that of the "going part" of our hand looms.

A still further development is to be seen in a Kelantan loom mode brought home by W. W. Skeat, now in the Cambridge Museum of Archaeology and Ethnology, in which the arms or side battens have disappeared altogether, leaving only the ends, furnished with the warp beam openings, which are held up by cord (Figs. 147 and 149). It will be noticed in one of the Malay and Bali arrangements (Figs. 146

<sup>1</sup> A model Malay loom in the British Museum from the Rani of Sarawak has a similar beater-in.

and 147), that the warp emerges, so to speak, from the lower edge of the warp board, while in another Malay loom (Fig. 144) the warp comes away from the upper edge.

In Raffles' *History of Java*, Plates, 1844, pl. IX, we are given an illustration of a loom, native name *tenunan*, from that island, which, while lacking somewhat in clear detail of the parts, gives us an intelligible idea of the whole (Fig. 150). On the other hand, Meyer and Richter give us fairly clear details of the parts of one loom, but curiously enough omit any illustration of the loom as a whole (even omitting details of the warp-board supports), so essential for arriving at a correct notion of what the loom is like. In this respect the full-sized loom from Java in the Manchester



Municipal School of Technology, already referred to, may be examined with advantage. Set up it is very similar to the one depicted by Raffles. The approximate length of warp is about 100 feet (or 30 metres). It consists of the warp board, already described, supported on slotted posts, a breast beam, reed, "single" heddle, laze-rod, shed sticks and wooden back strap,<sup>1</sup> temple wanting (Fig. 151). There are 82 warp ("single") to the inch (or 32.3 to the cm.) and 49 picks (threefold) to the inch (or 19.3 to the cm.). Although a primitive loom, the work is equal in every way to the best that can be produced on any loom, the selvedge is excellent and the

<sup>1</sup> Of the same shape as that of the model Malay loom in the British Museum, referred to in note, p. 345.

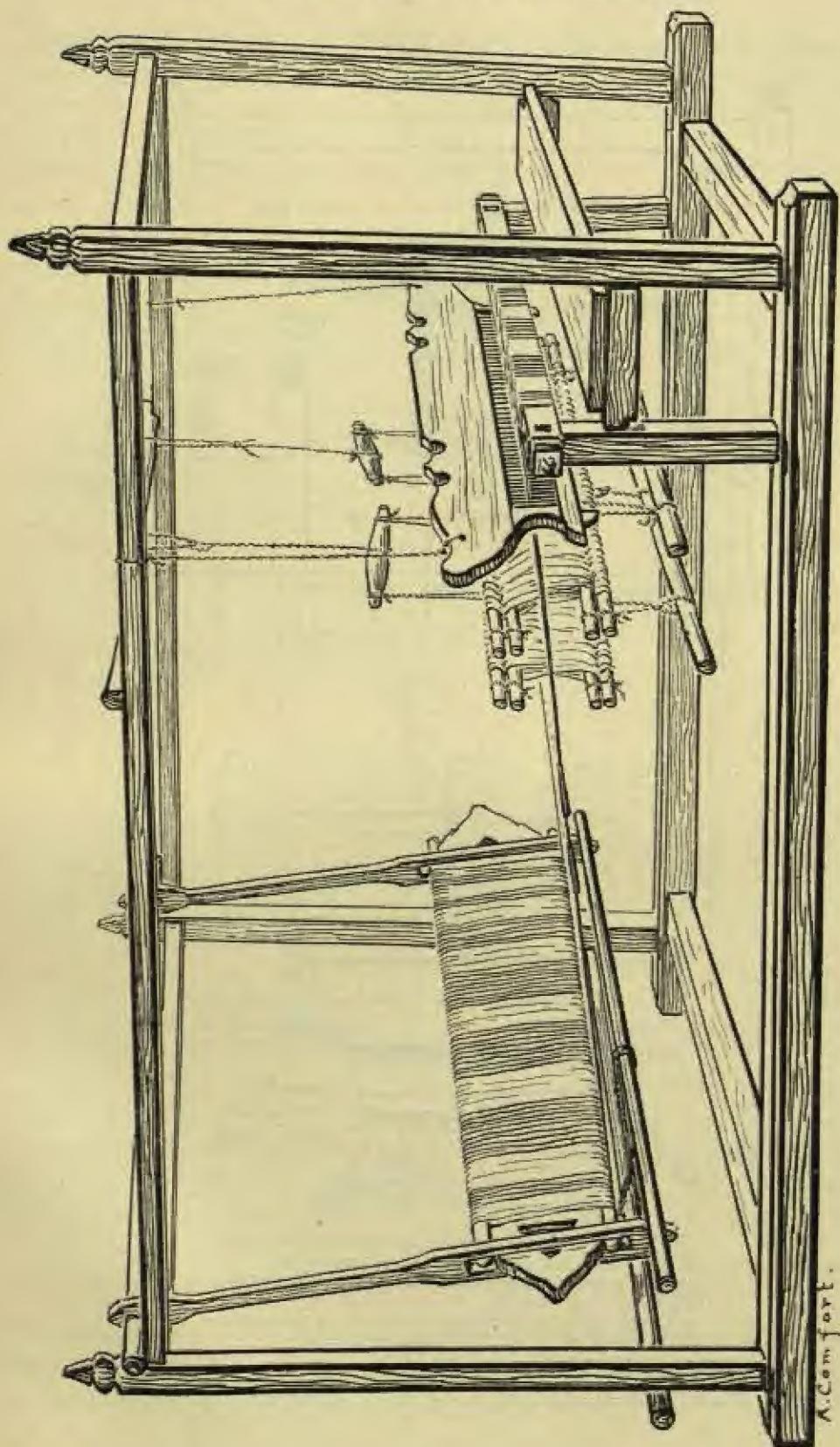
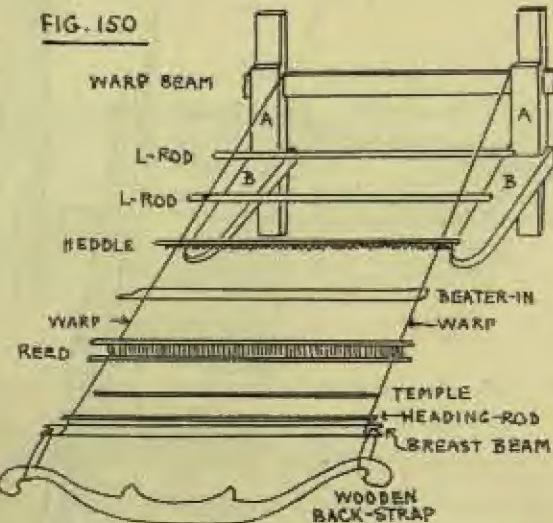
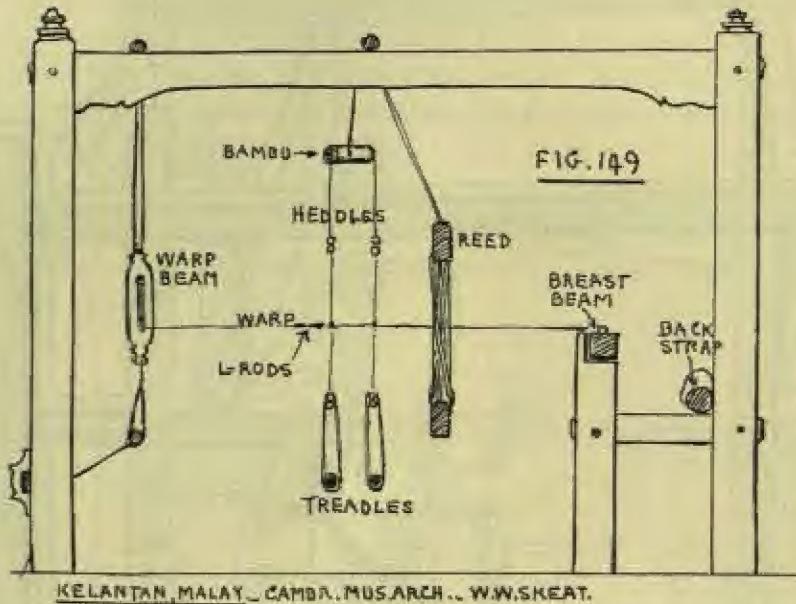


FIG. 148 PAHANG, MALAY LOOM.—BANKFIELD MUSEUM (LEONARD WRAY)



web fine and even throughout. Apart from the figured pattern in the cloth itself, the brocade of gold thread—gold (?) tape wound round a two-fold yellow yarn—

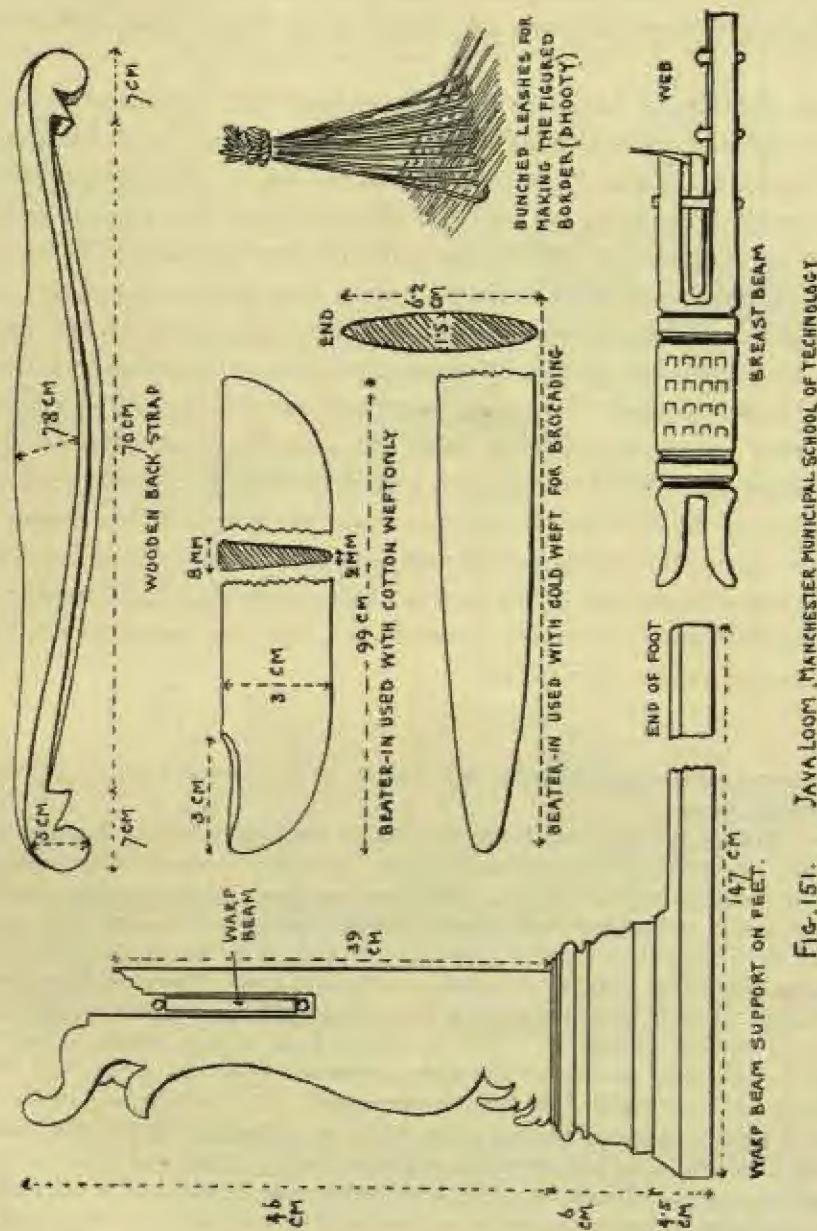


Fig. 151. Java Loom, MANCHESTER MUNICIPAL SCHOOL OF TECHNOLOGY

necessitates a second set of heddles, and for making the dhootty (figured border) there is what is known as a dhootty bobby, a set of heddle leashes bunched, but without any rod, as in the African mat loom (Fig. 59) and the African cotton loom

(Fig. 87).<sup>1</sup> Separate hard wood polished sword beaters-in are used for the figured pattern and for the brocade pattern. The reed is well and neatly made, the canes are fastened top and bottom and show considerable elasticity. The laze rod is of hard palm rind with the ends spear-shaped as in the Ilanun loom (Fig. 134). The shuttles belong to type Bb1, the gold-thread spool being topped with a carved knob.<sup>2</sup>

A flat warp board similar to those above described, but placed horizontally instead of vertically, is met with in Cambodia and is illustrated by J. S. Black<sup>3</sup> without any explanation in the text. I have reproduced it in Fig. 152 and the reproduction is, I hope, accurate in general, but owing to the smallness of the original the details cannot be correctly given. The points in this illustration which strike one immediately are the *downward* slope of the warp *away from* the weaver and the more or less flat position of the warp board, this board or beam being apparently not supported on posts, but fastened in position by means of cordage. It is probable that the flat outwardly sloping position of the warp board indicates the original position of this class of warp beams, such position being the least developed. The provision of double heddles and treadles renders some sort of framework necessary, in fact they are the cause of the existence of the framework, which appears to be made up of two distinct parts, viz. (1) the portion supporting the heddles and reed in which is placed the weaver's seat, and (2) the portion which supports the warp board or beam. Apparently these two portions are quite distinct, but have come together, forming perhaps the origin of the loom frame.

<sup>1</sup> Absence of rod is also mentioned by Harrison, 20, *op. cit.*, p. 48, with regard to the Lengua, South American, loom.

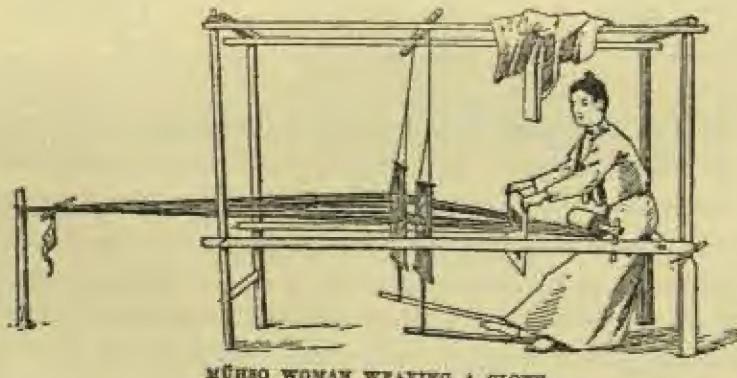
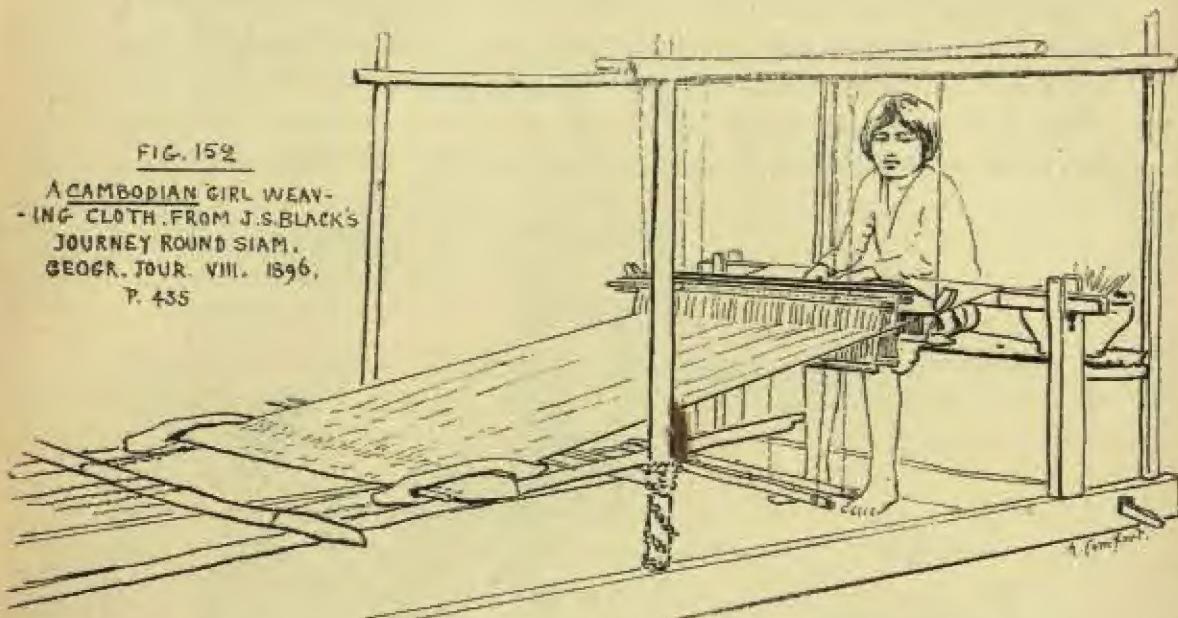
<sup>2</sup> Wm. Marsden mentions two forms of looms in Sumatra (*History of Sumatra*, London, 1783, p. 148), but neither of his descriptions is clear. He says: "Some of their work is very fine and the patterns prettily fancied. Their loom or apparatus for weaving (*tunnone*) is extremely defective, and renders their progress tedious. One end of the warp being made fast to a frame, the whole is kept tight, and the web stretched out by means of a species of yoke, which fastens behind the body, as the person weaving sits down. Every second of the longitudinal threads passes separately through a set of reeds, like the teeth of a comb, and the alternate one through another set. These are forced home at each return of the shuttle, rendering the warp close and even. The alternate threads of the warp cross each other, up and down, to admit the shuttle, not from the extremities, as in our loom, nor effected by the feet, but by turning edgewise two flat sticks which pass through. The shuttle, *toorah*, is a hollow reed, about 16 inches long, generally ornamented on the outside and closed at one end, having in it a small bit of stick, on which is rolled the woof or shoot. The silk cloths have usually a gold head. They use sometimes another kind of loom, still more simple than this, being no more than a frame in which the warp is fixed, and the woof darned with a long small pointed shuttle. They make use of a machine for spinning the cotton very like ours. The women are expert at embroidery, the gold and silver thread for which is procured from China, as well as their needles. For common work their thread is the *poolay* before mentioned, or filaments of the *pasang* (*musa*)."

<sup>3</sup> "A Journey round Siam," *Geographical Journal*, VIII, 1896, p. 435.

It seems that the formation of the complete loom frame out of two independent portions is due to the considerable development of the warp board supports, which

FIG. 152

A CAMBODIAN GIRL WEAVING CLOTH FROM J.S. BLACK'S JOURNEY ROUND SIAM, GEOGR. JOUR. VIII. 1896, P. 435



MÜHSO WOMAN WEAVING A CLOTH.

FIG. 153. COLONEL R.G. WOODTHORPE : SOME ACCOUNT OF THE SHANS. JOUR. ANTHR. INST. 1896 XXVI. P. 20.

we do not find outside Indonesia. The illustration (Fig. 153) of a Mühso loom as given by Colonel R. G. Woodthorpe<sup>1</sup> may at first sight appear to controvert the

<sup>1</sup> "Some Account of the Shans and Hill Tribes of the States on the Mekong," *Jour. Anthropol. Inst.*, 1896, p. 20.

fact that the frame is made up of two distinct portions, but the appearance of this Mühsö loom indicates rather artificial than natural growth. That is to say the growth has been due to exotic influences. Thus the warp post points to a survival of the Pacific type of loom, and the free reed to a period previous to that of the frame which would be adopted with the double heddles and treadles when the latter were copied from the Chinese. We have something similar in the Ashanti loom (Fig. 107), where a heavy stone, placed at some distance from the frame, serves as a warp beam; but, as has been pointed out, this loom grew up under exotic (European) influence.

KOREAN WEAVER. FROM A COLLECTION OF NATIVE DRAWINGS OBTAINED BY H.M. BECKER, ABOUT 1880.  
BRITISH MUSEUM.

FIG. 154.



WARP BEAM. FROM  
CAVENDISH'S KOREA  
LONDON 1894. GOLD  
PLATE PP. 52-53.

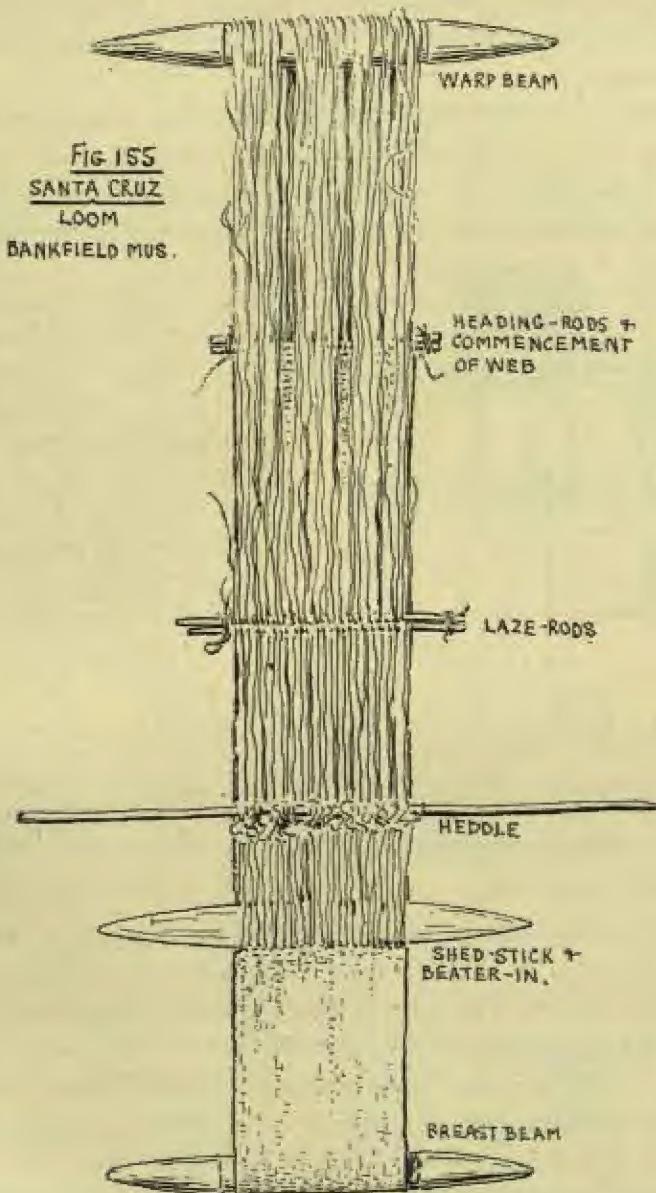


FIG. 154.A.

This flat warp beam is found also in Japan and Corea (Figs. 154, 154A), being, however, modified in both countries to the extent that the centre portion is cut away until the tool looks like a short square bladed canoe paddle. The object served by the flatness of the beam is not very clear. To a people devoid of mechanical genius, who are unable to make use of a round beam because they evidently could not invent a cross-head to prevent unwinding, a flat board would be sufficiently heavy to keep its position, and that position would be assured somewhat by a slope, as shown in the illustration of the Cambodian loom (Fig. 152). On the other hand, with this sort of beam the tension is not so easily regulated. On all looms provided with more or less squared, instead of round, beams the beams can only be turned the exact distance of the centre of one of the four sides to the centre of the next side, there being no intermediate shades of distance to get the exact amount of tautness required in the warp. This want of means of adjustment may be the explanation of the survival of the back strap with complete loom frame as seen in the Kelantan loom (Fig. 149).

There are a few small points to call attention to in the loom frames. The Pahang

Malay loom (Fig. 148) is supplied with the usual complete harness for working the heddles (whipple trees and not pulleys being in use); the treadles consist of two pieces of bambu placed transversely to the warp, forming a convenient foothold. In the Cambodian loom (Fig. 152) the harness appears not to be so far advanced as



yet, and unfortunately is not as clearly shown in the original as could be wished, but the indication is to a loose cord passing from one heddle over cross pieces on top of the loom frame, and down to the other heddle. The treadles appear to be similar to those in Fig. 148, and in the Kelantan loom (Fig. 149) the upper cord joining the

heddles passes through the natural hollow of a piece of bambu supported on the top of the frame.

Belonging to the Indonesian series is the well-known Santa Cruz form of loom, chiefly remarkable for the long distance it has wandered away from what was presumably its original home. The loom is, as we shall see, not by any means limited to the island of Santa Cruz, but is found on the route to this group from the eastern outskirt of Indonesia.

The specimen in Bankfield Museum (Fig. 155), which is quite typical, consists of breast and warp beams, two heading rods, four laze-rods, one "single" heddle, sword beater-in and spool. The heading- and laze-rods are narrow strips of cane  $\frac{1}{2}$  inch (or .6 cm.) across the flats; the heddle rod is of wood 22 $\frac{1}{2}$  inches (or 63 cm.)

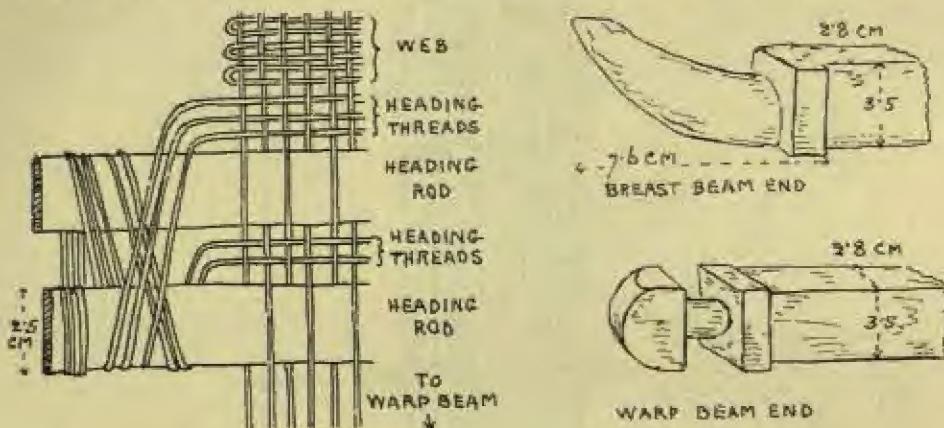
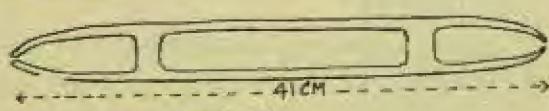


FIG. 155 A. SIKIANA (STEWART IS.) 1905. BRIT. MUS.



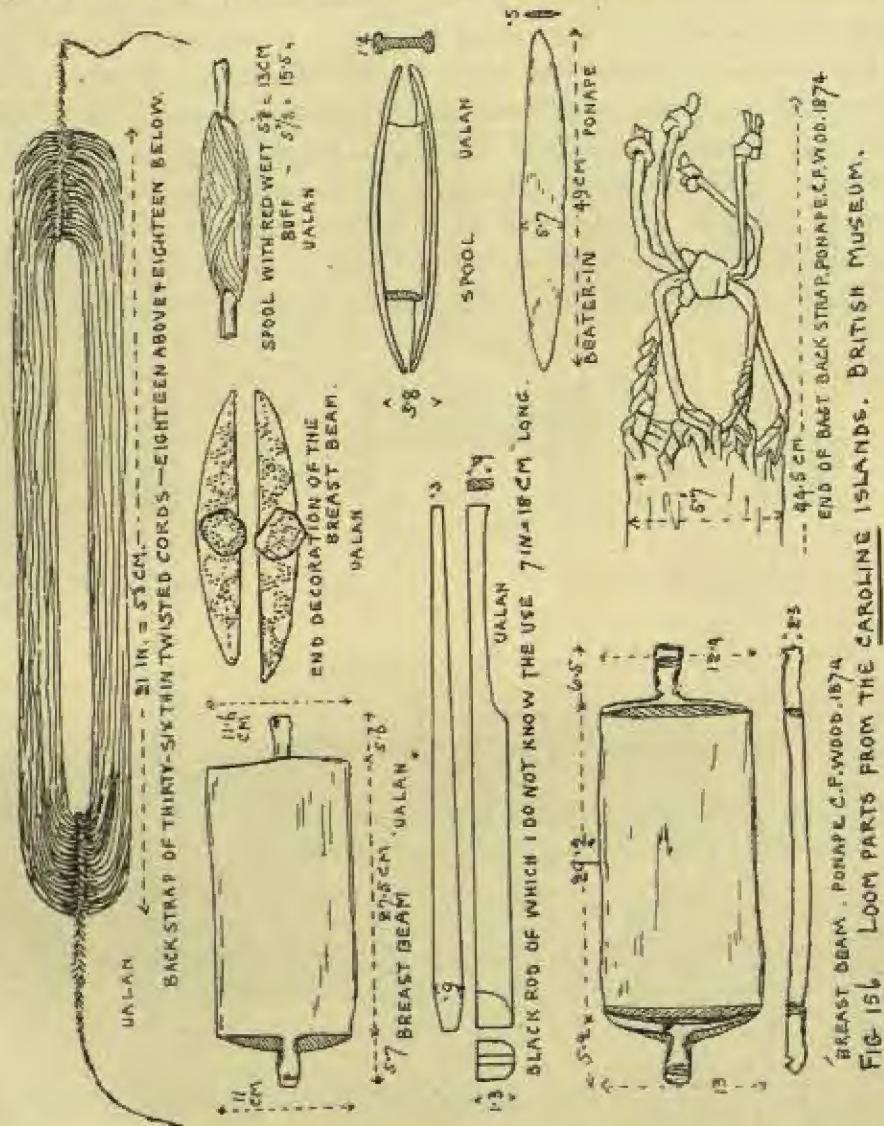
SANTA CRUZ, BRIT. MUS.



SPOOL, SANTA CRUZ, BR. MUS.

long, the leashes being made of twisted fibre and are continuous, alternate overlapping. The beater-in is of hard wood fairly well polished, flat and oval and tapering from the middle to a fine edge all round, measuring  $\frac{1}{2}$  inch (or .6 cm. in thickness,  $1\frac{1}{8}$  inch (or 4.6 cm.) in breadth, and  $15\frac{1}{2}$  inches (or 38.4 cm.) in length. The warp consists of split non-spun filament, the end of one filament being knotted on to the end of the next, and so on, by means of which any length is obtainable. The weft is also of non-spun filament, said to be banana fibre. In the process of weaving both warp and weft—although in many parts the former is still splitting—are all single; that is to say we do not find two or more filaments acting as one warp as is the case with the Kwa Ibo and Ba-Pindi, African, looms. At the start the first pick is a piece of twisted fibre acting almost as a heading rod. In the use of non-spun filament, both as weft and warp, this loom shares the peculiarity with Ainu, Igorot, and African looms, etc. The spool is form Ad 1.

A somewhat modified form is that of the Sikiana loom in the British Museum, obtained in the year 1905. The fabric is of non-spun fibre, with a good selvedge and an Oxford shirting pattern obtained by means of white warp and red and blue weft, the bulk of the warp and weft being of the natural buff colour. The noticeable parts are the heading arrangement (Fig. 155A), which somewhat unusual form



may possibly be due to difficulty in fixing up smooth non-spun filament and the perforated spool. A similar perforated spool accompanies a Santa Cruz loom obtained in 1891 from A. Lister Kaye. There are other specimens of Santa Cruz looms in the British Museum which do not call for special attention, except that on the last-mentioned loom there is a leash cord winder, form Ba, and that, although the handle of the beater-in is broken, it may be like the handle in Figs. 165 or 167.

We now turn to the Caroline Islanders' loom. It is, unfortunately, the case that we are rarely favoured by travellers with any particulars of the preparation or laying of the warp which precedes the beaming or putting the warp on to the loom. In part this is due to the fact that in very primitive weaving the warp is laid on the beams of the loom as soon as there is a sufficiency of yarn. In the Caroline Islands, however, the method of laying the warp is so noticeable that the process has been recorded by several travellers. The first known description of the process is illustrated in a coloured plate in the atlas to Duperrey's *Voyage of the "Coquille,"* Paris, 1836, in which can be seen the warping bench and its peculiar grid.<sup>1</sup> To explain the method of working it will be as well to examine first a piece of the fine matwork, made with non-spun fibre, which has been laid on this warping bench by means of the grid. The beautiful piece of work in question was obtained by C. F. Wood in Ualan and brought to the British Museum as far back as 1874.

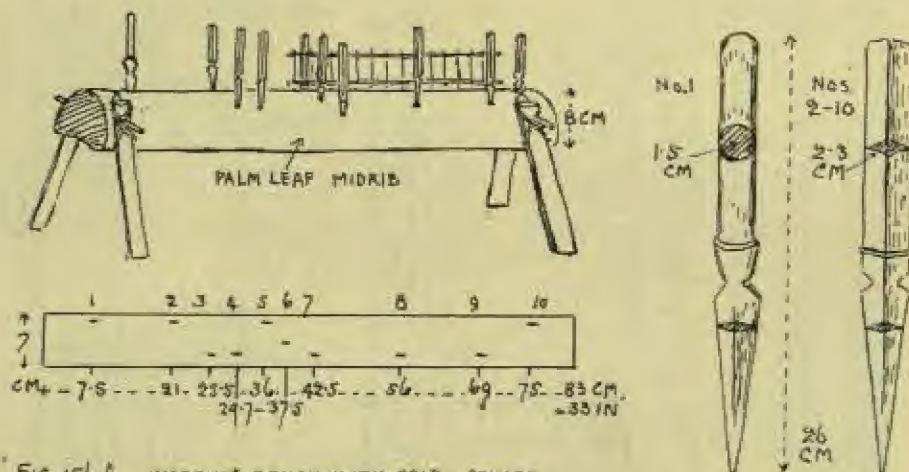


FIG. 156 A. WARPING BENCH WITH GRID. PONAPE,  
CAROLINE ISLANDS. BRITISH MUSEUM. (C.F.WOOD)

The piece (Fig. 156b) may be divided up into the following sections (omitting the inch length of heading), viz.: I,  $15\frac{1}{2}$  to 16 inches (or 41 cm.) long, with a red warp and alternate 2 picks of brown and 2 picks of buff throughout. II, 37 inches (or 94 cm.) long, in which the warp arrangement is 2 red, 2 buff, 2 red, 12 buff, repeated 18 times for the width of the web; for a length of 33 inches (or 84 cm.) the picks are 4 buff and 2 brown repeat, and for a length of 4 inches the picks are all buff. III, 10 inches (or 25.5 cm.) long, the warp all buff with five patterns obtained by means of brown and red weft (Fig. 156c). The sections I, II and III are joined together by a simple knotting of the corresponding warp threads, and in doing this the worker has not been very careful or skilful enough to make the joint tally with a pick. That is to say, the joint passes askew along the picks over as much as  $\frac{1}{2}$  inch (or 1.25 cm.) out of the parallel; this may, perhaps, be due to the difficulty of making so many ties side by side, but the

difficulty can be overcome as shown at the end, for the joint there does run parallel with the pick. In another beautiful piece of similar work a belt formerly belonging to a Ponape chief, named Ometha, there are five warp-jointings, of which only one is perfect.

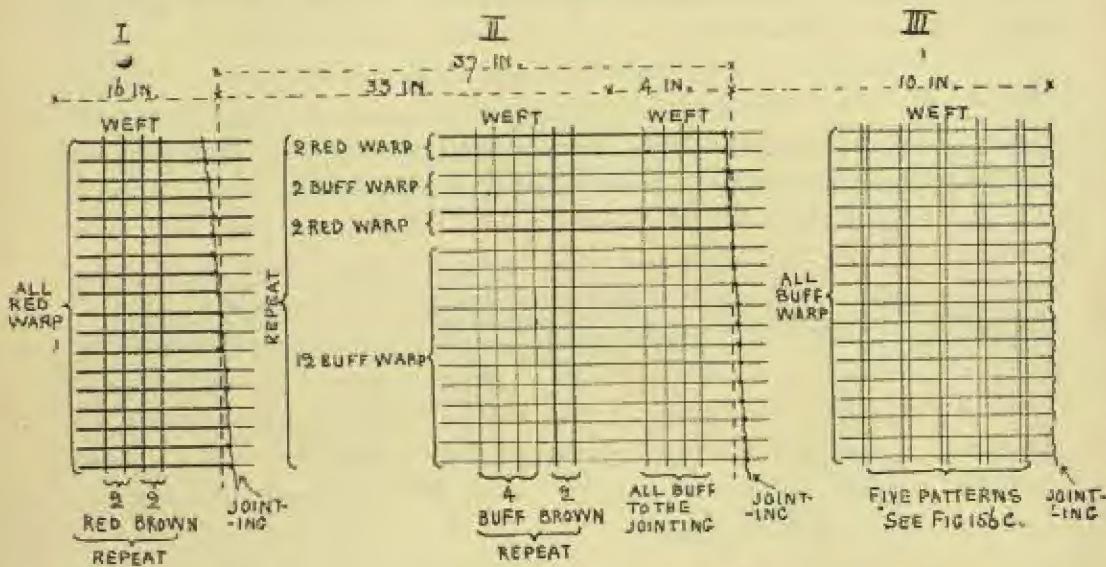


FIG. 156B. DIAGRAM TO SHOW THE WARP SECTIONS ON THE PONAPE BELT, BRIT. MUS.

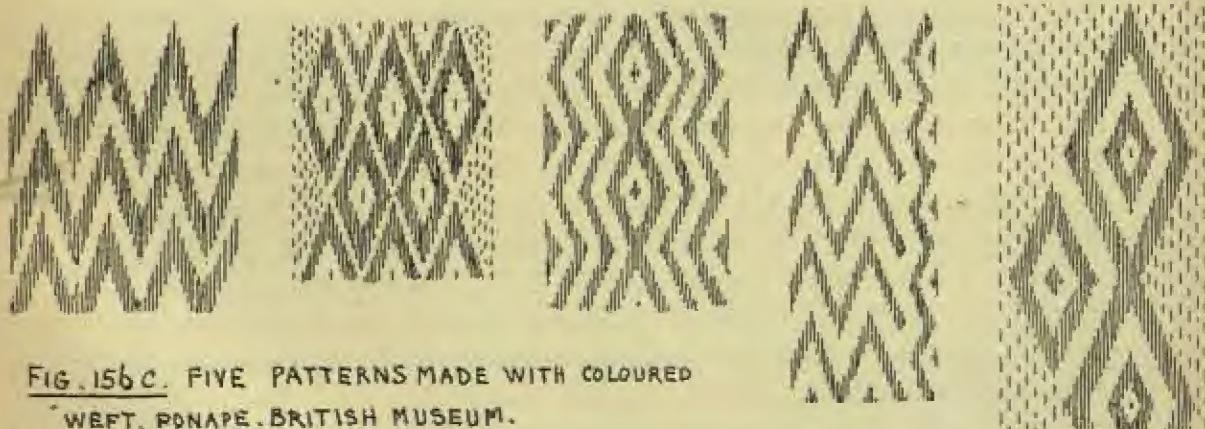


FIG. 156C. FIVE PATTERNS MADE WITH COLOURED WEFT, PONAPE, BRITISH MUSEUM.

It is in order to regulate the length of the sections I, II and III, or as many more as may be necessary, to give the worker the measured length of warp required for the pattern essentially produced by the warp and not by the weft, that the grid comes into use, the pegs on the bench being for the usual warping purposes. The

Coquille grid has sixteen spaces between the bars of the grid from end to end, and so has the British Museum specimen. Finsch's illustration<sup>1</sup> shows ten spaces; in the Hernsheim illustration<sup>2</sup> the particulars are too small to be enumerated. The Coquille bench has seven flat pegs and one round one. Finsch shows seven pegs, and the British Museum specimen has one round peg and nine flat (diamond section) pegs. The Hernsheim illustration shows six pegs.

My explanation does not tally with that of Finsch, who says: "Wie die Pfloecke die Laenge des ganzen Gewebes angeben, so das Heck die Laenge der gemusterten Endkante desselben, wahrend die Querstaeben des Heck wiederum die Laenge der einzelnen Quarstreifen des Musters bestimmen (In the same way as the pegs indicate the length of the whole fabric, the grid gives the length of the patterns, while the bars of the grid settle the lengths of the individual patterns)." If the grid indicates the length of the patterned piece, i.e., a section like I, II or III, a separate grid would be required for every section. It is the grid's bare, or two ends as the case may be, which regulate the warp lengths of the sections, which work is necessarily done on the warping bench. There is no necessity for, nor possibility of, regulating the length of the individual patterns like I 1, 2, 3, 4, and 5, because this is not done on the warping machine but on the loom by means of a greater or smaller number of picks.

The particulars of a loom parts from Ualan (Strong's Island) in the British Museum are as follows: Beam to beam (warp beam missing), 37 inches (or 94 cm.); width of web, 6½ inches (or 17.5 cm.). The breast beams, which have an elliptical section, are provided with lugs at both ends. The ends of a painted one are peculiarly decorated apparently by filling up small holes with lime arranged in triangular patterns. One back strap is made of eighteen strands of twisted fibre, 27 inches (or 68.5 cm.) long from head to head; another back strap is 17½ inches long by 2½ inches wide (or 44.5 by 5.7 cm.), and is made of bast, with the ends plaited into the necessary loops for beam attachment. There are two small spools, form Ba, one filled with black and the other with red fibre, which, like the warp, is non-spun; also a spool, type Ad1, body painted red and horns black. The Coquille illustration shows two spools of different shapes, one of which may possibly be similar to the New Britain modification (Fig. 161). It is accompanied by a short piece of hard wood, the functions of which are not clear to me and which may not belong to the loom. There is a much worn beater-in, which is similar to the one in the Coquille illustration.

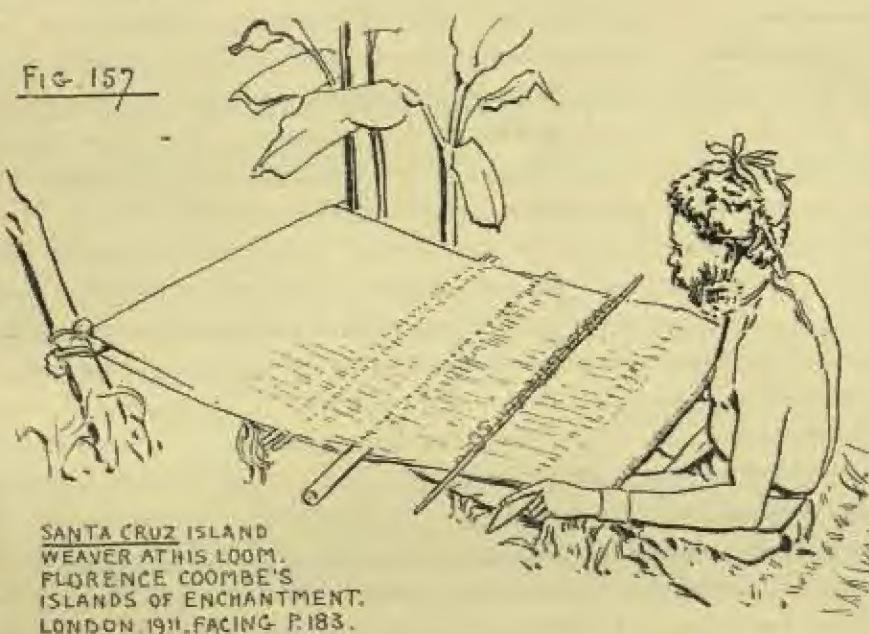
According to Kubary,<sup>3</sup> as regards the looms of the Ruk and Mortlock Islands,

<sup>1</sup> *Ethnologische Erfahrungen*, Vienna, 1893, p. 220.

<sup>2</sup> *Sued-See Erinnerungen*, Berlin, 1883, p. 44.

<sup>3</sup> Schmeltz and Krause, *Die Ethnographisch-Anthropologische Abtheilung des Museum Godeffroy in Hamburg*, Hamburg, 1881, p. 346.

the warp beam is fixed on to two upright posts. On St. Mathias' Island, north-west of New Hanover, according to R. Parkinson,<sup>1</sup> the weavers, who are women, in order to keep the warp taut, press their feet against the warp beam and their backs against the back strap, from which we may infer that on this island no upright posts are used on to which to attach the warp beam. On p. 548, however, the same traveller illustrates a man seated at a loom, the warp beam of which is fastened to a standing tree trunk. Florence Coombe<sup>2</sup> gives an illustration (Fig. 157) of a man at Santa Cruz engaged at a loom, the warp beam of which is fastened to two upright tree trunks. One must conclude that, as among the Ainu, the warp was stretched by means of the feet in some localities and by means of fixed posts



in others. But whether the warp beam is tied to uprights or is kept in position by the feet, why in the specimens in the Cambridge Museum of Archaeology and Ethnology, in the Norwich Castle Museum, in the Brighton Museum, in the Imperial Institute (which comes from Rotuma), and in all the specimens in the British Museum, should one cone-shaped end of the beam be more or less pointed and the other end have, as it were, its point bashed in or roughly flattened (Figs. 158, 166, and 168), as if the point had been hammered more or less flat? In the Bankfield Museum specimen the bashing is not so marked, and one beam is shorter than the other, their lengths being 16 and 17 inches (or 41 and 43 cm.) respectively. While

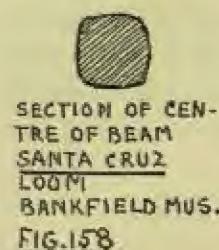
<sup>1</sup> *Dreissig Jahre in der Sued-See*, Stuttgart, 1907, p. 334.

<sup>2</sup> *Islands of Enchantment*, London, 1911, plate facing p. 183.

the ends are tapered more or less to a point as just mentioned, the bodies of the beams are not cylindrical, but of a slightly rounded square in section<sup>1</sup>, and this



HAMMERED END  
OF BEAM, SANTA CRUZ



SECTION OF CEN-  
TRE OF BEAM  
SANTA CRUZ  
LOOM  
BANKFIELD MUS.  
FIG. 158

holds good of three of the other specimens referred to, the exception being the Rotumah warp beam, the section of which is rectangular. On the other hand, the New Britain specimen has both beams circular in section (Fig. 159), the breast beam having a neck to which to attach the back strap, the warp beam having a shoulder only. Schmeltz and Krause<sup>2</sup> speak of beams in the Lukunor group (Mortlock Island) as "about 97 cm. long, 16 cm. wide and 2 cm. thick" (38 inches by 6½ by ¾), hence they must be rectangular in section, or board-shaped, and later on (p. 346) they quote Kubary, who says of the Nukuor (Carolines) warp beams: "The boards are made of hard wood, rectangular in shape, about 1 m. long,

.2 m. broad and .03 m. thick (39 inches by 7½ by 1½)," the breast beam having lugs for the back strap, but the warp beam being without.

Graebner<sup>3</sup> tells us of this Santa Cruz loom: "It is the old Indonesian loom as it exists in the Western Carolines and has been only altered in somewhat essential points in the eastern part of the archipelago, in Kusaie and Ponape." The alterations he explains in a footnote as consisting in the board-like expansion of the beams and the introduction of the heddle frame. He continues: "All the same the original type on Truk-Mortlock (Central Carolines) has experienced one, even if trifling, change in the alteration of one of the laze-rods into a cylindrical stick round which the warp is wound."<sup>4</sup>

Graebner has, however, not realized that the flat beam is a characteristic of one of the Indonesian forms of loom, and that cylindrical laze-rods with the warp wound round once are found in the Bhotiya loom (Fig. 128) and Ilanun loom (Fig. 134), so that instead of these details showing modifications in some parts of the Carolines they are, in fact, survivals. Hence it would seem to be in the eastern portion of the

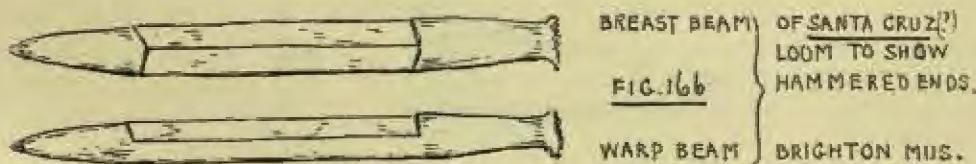
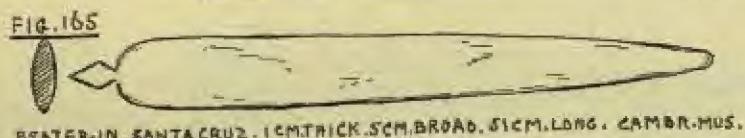
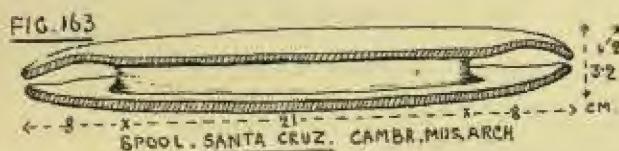
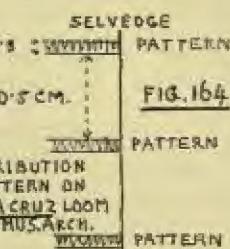
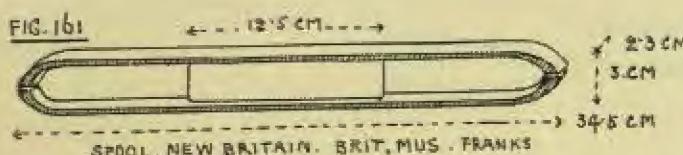
<sup>1</sup> In F. Graebner's *Volkerkunde der Santa Cruz Inseln* (published in Foy's *Ethnologica*, i, Leipzig, 1909, p. 123, Fig. 53) the middle portions of both beams are seen to be more or less square in section.

<sup>2</sup> *Op. cit.*, p. 326.

<sup>3</sup> *Op. cit.*, p. 177.

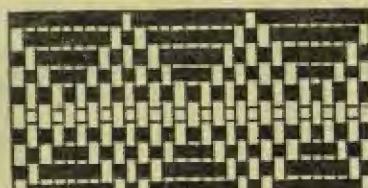
<sup>4</sup> "Es ist der alte indonesische Webstuhl, wie er auch auf den West-Carolinen vorhanden und nur im östlichen Teile des Archipels, auf Kusaie und wohl auch Ponape, in einigermassen wesentlichen Zügen umgestaltet worden ist. Immerhin hat der ursprüngliche Typus doch auch auf Truk-Mortlock eine, wenn auch geringe Umgestaltung erfahren, durch die Umwandlung eines Faden-trenners in ein Rundholz, um das die Kettenfäden herumgeschlungen werden." His footnote runs: "Durch brettförmige Verbreitung der Spannholzer und durch Einführung des Staebchenrostes"

Carolines, Ponape and Kusai, that the flat beam has held its own, and in the south central portion, Lukunor and Nukuor, the cylindrical laze-rod has held its own. It seems, further, that in leaving the Carolines the beams have lost their board-like character and have assumed the square shape preparatory to adopting the more practical cylindrical form.



In the following table I have grouped together for purposes of comparison particulars of dimensions and other details of the looms examined by me. As regards dimensions, warps and picks to the inch, etc., they are pretty much alike, except

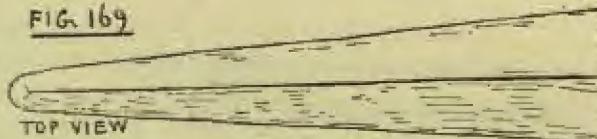
the New Britain loom, which, as already pointed out, has cylindrical beams and differs further in having the spool square nosed (Fig. 161) instead of pointed as in the other cases (Figs. 163, 169, 170). Schmeltz and Krause<sup>1</sup> describe in words some of the Santa Cruz spools in the Godefrey collections without giving any illustrations,



PATTERN

FIG. 168  
ROTUMA IS.  
IMPERIAL  
INSTITUTE

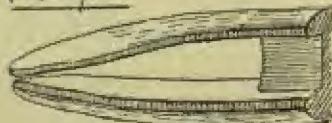
---63 CM---  
SECTION  
BEATER-IN  
109 CM. LONG

FIG. 169

TOP VIEW  
SPOOL END, BARAM RIVER, BORNEO.  
BANKFIELD MUS. (CHAS. HOSE)



SIDE VIEW

FIG. 170

SIDE VIEW

SANTA CRUZ SPOOL END, BANKFIELD MUSEUM.

END VIEW

which is not satisfactory, and I cannot find that they, or any other writers, refer to this form of spool end, although the Coquille illustration may possibly indicate a square-nosed spool end. The spool and the origin of the New Britain loom are out of the common and we need further information about it. It was purchased by the late Sir Augustus W. Franks for the British Museum, from a Norwegian captain.

<sup>1</sup> *Op. cit.*, pp. 326 and 345.

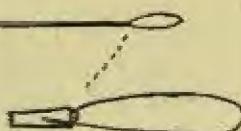
Origin of Loom.	Museum where now placed.	Length, Beam to Beam inclusive.		Width of Web per—		No. of Warp to the		No. of Picks to the		Section of Warp Beam.	Spool End.	Warp and Weft.	Heddle Leashes.					
		In.	Cm.	In.	Cm.	In.	Cm.	In.	Cm.									
Twisted filament, continuous, alternate, overlapping.																		
All of non-spun filament.																		
Santa Cruz ..	Bankfield ..	43	109	64	16.6	21	8.3	23	9	Square ..	..	Taper to a point. ..	..					
" ..	Cambridge ..	27½	70	16½	42	34	13.4	16	6.3	" ..	" ..	" ..	" ..					
" ..	Norwich ..	38½	98	20½	52	35	13.8	21	8.3	" ..	" ..	—	—					
" ..	Brighton ..	43½	110	35½	90	32½	12.7	14½	5.7	Flat on 3 sides. ..	—	—	—					
Vera Cruz ..	British ..	19½	49.5	10½	26	32	12.6	25	9.8	Square ..	..	Taper ..	..					
Siciliana ..	" ..	49½	126	21½	54.5	32	12.6	25	9.8	" ..	..	—	—					
Santa Cruz ..	" ..	30	76	7½	20	44	17.3	25	9.8	" ..	..	Taper ..	..					
" ..	" ..	60	152.5	19½	49	42	16.5	24	9.4	" ..	..	—	—					
Rotuma ..	Imperial Institute.	52	132	—	—	25	9.8	19	7.5	Rectangular ..	—	—	—					
New Britain ..	British ..	28	71	25½	65	25	9.8	23	9	Circular ..	..	Flat-nosed..	..					

The Rotuma specimen (Fig. 168), which is a typical Santa Cruz loom, except that the warp beam is rectangular, appears to indicate that the loom has travelled further west than has been suspected hitherto. Rotuma is an island about 480 miles almost due west of Tukopia, where Parkinson has reported<sup>1</sup> its existence, this island lying E.S.E. of Vanikoro, Santa Cruz group, and N.W. of Vanua Levu, Banks Island. That is to say the loom must have travelled twice the distance it did earlier in its migration from Pikiram (Greenwich) Island to Nuguria (Abgaris) Island. Nothing so very great. Unfortunately the authorities of the Imperial Institute can only say they received it labelled from Rotuma Island. One of the patterns (Fig. 168) is somewhat similar to those illustrated by Graebner, but nearly all his pattern illustrations are so small as to be almost useless, which is rather curious as he lays stress on the patterns as evidence of migration.

The patterns on these woven mats are arranged in more or less broad bands (Figs. 164 and 168) embroidered over the picks by means of banana fibre coloured black on one side only, that is they do not show on the wrong side. There is a loose specimen of this coloured fibre with the Norwich Castle Museum loom. Fringes also arranged in bands by insertion are common and on some there are loops arranged apparently for supporting the mats, which may have given origin to the fringe decoration. A specimen of the embroidery needle is shown in Fig. 171.

FIG. 171. EMBROIDERY NEEDLE, SANTA CRUZ, IN THE POSSESSION OF MR A. LISTER-KAYE, FROM EDGE-PARTINGTON'S ALBUM.

"LONG NEEDLE OF WOOD [38IN = 96.5 CM] WITH LOOP OF COCO-NUT FIBRE PEGGED IN, USED FOR DRAWING THRO' THE BLACK THREAD WHICH FORMS THE PATTERN. THE FIBRE IS MADE FROM THE TRUNK OF THE BANANA SCRAPPED DOWN AND BLEACHED."

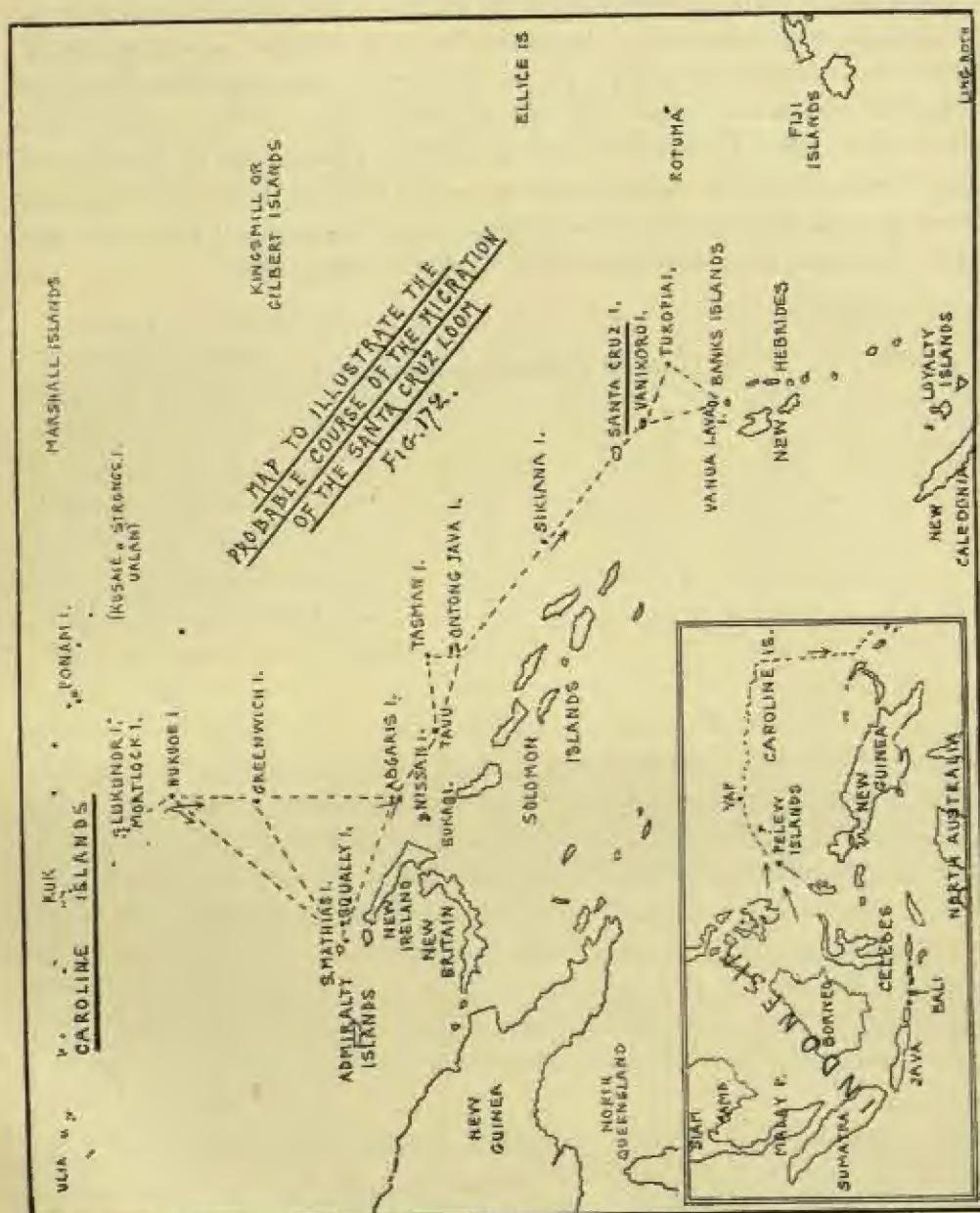


The route by which this Indonesian loom reached so far east has been conjectured and studied by Codrington<sup>2</sup>, Parkinson, Graebner and others, from whose works I have prepared the accompanying map (Fig. 172). It would appear to have come via the Pelews and Carolines, and supposing it to have traversed the shortest route it would have come from Nukuor via Greenwich (Pikiram or Kapinga-marangi) island and thence either to St. Matthias Island, and its neighbours Kerue and Squally islands, or to Abgaris (Nuguria or Faed) island, thence to Taun (Mortlock) island to Tasman island (Nukumana atoll), to Ontong Java (Leventia or Lord Howe's) island, Sikiana (Stewart) island to Santa Cruz group, thence to Banks Island, or

<sup>1</sup> *Op. cit.*, p. 343.

<sup>2</sup> *The Melanesians*, Oxford, 1891, pp. 20 and 316.

perhaps first to Tukopia, and thence to Banks Island. It will be seen that in the course of its migration it fringes the northern boundary of the Solomon Islands without establishing itself on them, a fact no doubt due to the ferocious nature of



the natives there, who would be powerful and numerous enough to prevent the settlement on their shores of the higher civilized migrants who might have introduced the loom. On the small outlying islands where the natives were fewer in number

the immigrants would necessarily have more chance of settling and introducing their culture.

From all accounts, in the Pelews, if it ever did exist there, and in most of the Carolines, as well as in the islands which formed the stepping-stones of its migration, the loom has now disappeared. Codrington<sup>1</sup> more than thirty years ago recognised that it had vanished from Banks Island, a disappearance which Rivers<sup>2</sup> ascribes to the loss of ritual essential to the working of the loom. Rivers' corollary that ritual was therefore an essential factor in primitive weaving may be supported, if support be necessary, by the conclusion one must draw from the Bhotiya webstress' refusal to work with any but a certain beater-in as mentioned on p. 333, and by the apparent ritual in use with the Java loom as referred to on p. 344.

[Part IV—Conclusion—to follow.]

<sup>1</sup> *Op. cit.*, p. 321.

<sup>2</sup> *History of Melanesian Society*, Cambridge, 1914, ii, p. 444.

ON SOME HUMAN AND ANIMAL BONES, FLINT IMPLEMENTS, ETC.,  
DISCOVERED IN TWO ANCIENT OCCUPATION-LEVELS IN A SMALL  
VALLEY NEAR IPSWICH.

By J. REID MOIR.

THE object of this communication is to give an account of the excavations carried out in two ancient occupation-levels which occur in the brickfield of Messrs. A. Bolton & Co., Ltd., Henley Road, Ipswich,<sup>1</sup> and to describe and figure the various prehistoric relics recovered. The work, which commenced in April, 1914, was continued until May, 1916, when the author's trained quarryman, John Baxter, was called up for service in the Army. During the whole of the research the greatest care was taken to ascertain the exact position of every specimen found, and all the implementiferous deposits were removed by means of hand-trowels, a laborious but necessary procedure. All the specimens described in this paper were found *in situ* in geological deposits—none were lying upon the present land surface. The money to pay for the labour employed in the excavations was most generously supplied by the Trustees of the Percy Sladen Memorial Fund, to whom the author feels very greatly indebted for their unstinted and invaluable support. He is also under a debt of gratitude to Mrs. Neal Fonnereau, Messrs. A. Bolton & Co., Ltd., Prof. Arthur Keith, F.R.S., Dr. W. L. H. Duckworth, Dr. John E. Marr, F.R.S., The Director of H.M. Geological Survey, the late Mr. Clement Reid, F.R.S., Mr. Alfred Bell, Dr. Charles Andrews, F.R.S., Dr. A. B. Rendle, F.R.S., Prof. Cossar Ewart, F.R.S., Mr. Reginald Smith, Prof. V. Commont, Dr. A. Rutot, Messrs. E. Packard & Co., Ltd., Mr. E. T. Lingwood,<sup>2</sup> Mr. I. Rice, and Mr. Henry Ogle, without whose kind co-operation and help this paper could not have been compiled. It is proposed to describe the work carried out and the discoveries made under three heads, viz. :—

- (a) The Geological Data.
- (b) The Human and Animal Bones.
- (c) The Flint Implements and Pottery.

<sup>1</sup> Two other papers dealing with this site have already appeared, viz., J. Reid Moir, *Ipswich Field Club Journ.*, 1913, and Reginald A. Smith, *Journ. Roy. Anthropol. Inst.*, xliv, 1914, July–December, pp. 376–384.

<sup>2</sup> Mr. E. T. Lingwood has most kindly drawn the flint implements found during the excavations.

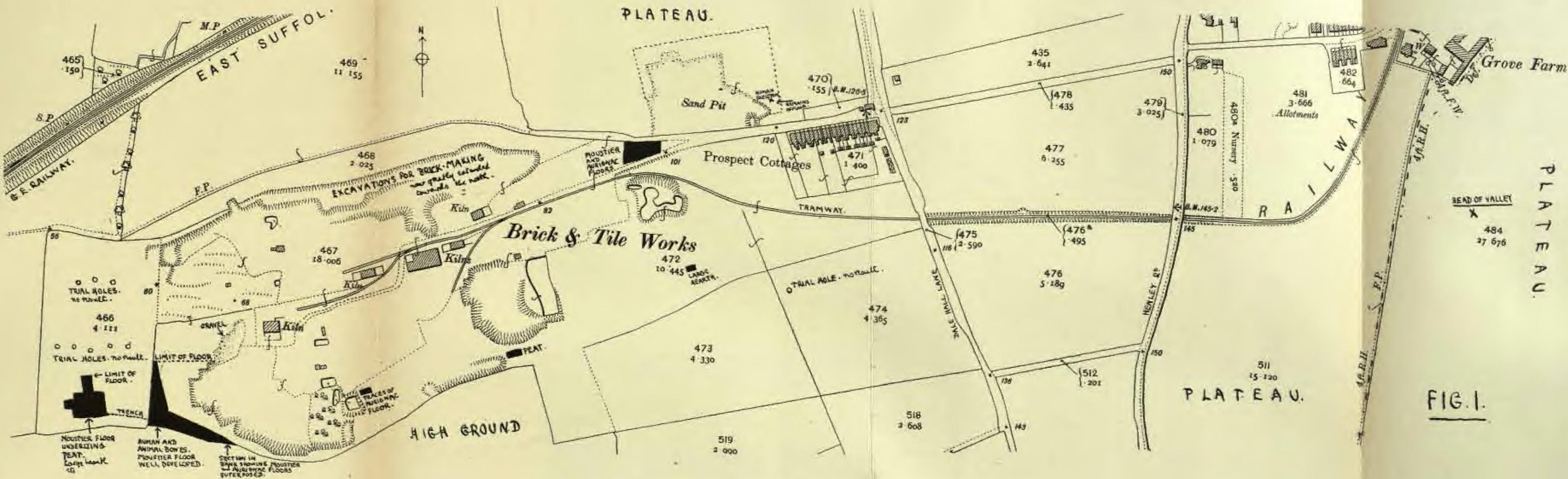
## THE GEOLOGICAL DATA.

The small valley in which the brickfield of Messrs. A. Bolton & Co., Ltd., occurs, commences as a slight depression in the plateau to the east of Henley Road, and, gradually deepening and developing a somewhat sinuous course, joins the main valley of the River Gipping about a mile to the westward. The valley, which is now streamless, is typical of a large number of other tributary valleys in Suffolk, but its origin remains somewhat obscure. It does not seem possible that the somewhat limited area of the flat plateau at the head of the valley (about 155 O.D.) could have ever afforded a suitable gathering ground for rain-water in sufficient quantity to excavate such a valley, especially as the ground slopes away rather rapidly to the north and east, and at no great distance from where the initial depression of the valley is situated. But it seems probable that an accumulation of ice and snow upon the plateau, when melting, would give rise to sufficient water to excavate the valley, and it may be that such an agency was responsible for its formation. The evidence afforded by the diggings would seem to show that the valley was excavated in two stages, the first after the deposition of the glacial Chalky Boulder Clay, and the second at a time later than the formation of the occupation-levels, hereafter to be described. Moreover, the burying of the latest of these occupation-levels, under some thickness of what is known as "hill wash," which in places can be best described as a sludge, associated with a period of low temperature, seems to support the opinion mentioned above as to the erosion of the valley, at least in its second stage, as being due to the melting of an accumulation of ice and snow upon the plateau.<sup>1</sup> But whatever the cause, the valley, as now developed, has cut down through the Chalky Boulder Clay, the Glacial Gravel, the Red Crag,<sup>2</sup> the London Clay, and into the underlying Woolwich and Reading beds. The cutting through of the London Clay has allowed of the water on its surface discharging itself as springs, now underground, and doubtless the presence of these springs upon the then existing land surface was one of the main causes of the occupation of the valley by the prehistoric peoples, whose traces have been found in such abundance. The numerous excavations made by the brickmakers in raising London Clay in the centre and sides of the valley, show very clearly that the ancient occupation-levels do not extend across the valley, and the archaeological diggings (Fig. 1) have afforded evidence of the same nature. The ancient occupation-levels<sup>3</sup> cut the surface some feet (at about 80 O.D.) above the present valley

<sup>1</sup> Dr. Marr believes that towards the end of Upper Palaeolithic times a cold period obtained in the Cambridge district. See *Nature*, Mar. 22nd, 1917.

<sup>2</sup> The sands designated as Red Crag do not here contain any fossil shells, and some geologists have expressed a doubt as to the correctness of this designation.

<sup>3</sup> The occupation-levels do not lie parallel with the slope of the sides of the present valley.



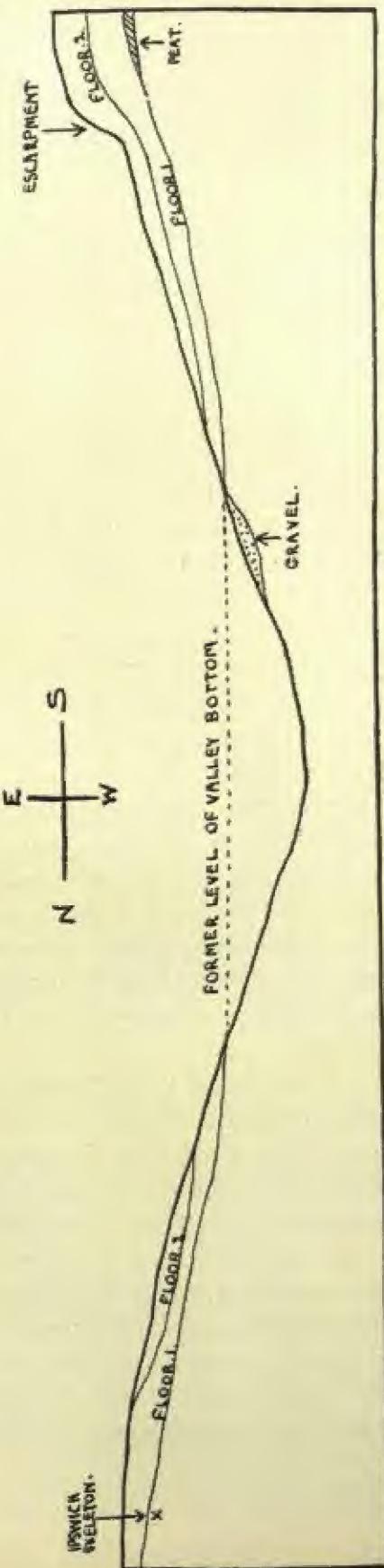
PLAN OF VALLEY SHOWING THE VARIOUS SITES AT WHICH EXCAVATIONS WERE CONDUCTED.



bottom, and it seems reasonable to conclude that these occupation-levels were at one time continuous from side to side, but that the subsequent deepening of the valley has removed that portion of them which at one time rested upon the floor of the valley before it was deepened (Fig. 2). And this conclusion is supported by other evidence. Towards the western end of the valley and low down upon its left flank a gravel is exposed (Fig. 2), evidently of fluvial origin, and this deposit contains specimens of humanly-worked flints which, in the author's opinion, exhibit undoubtedly the same technique as those he found in the more ancient of the two occupation-levels in the valley.

But whereas the specimens found in the ancient "floor" are quite sharp, unglazed and unabraded, those from the gravel are slightly rolled, and in most cases show a well-marked glaze and the beginnings of patina. It would thus appear that this deposit of gravel was laid down during the second stage of the erosion of the valley, and contains, as would be expected, specimens of humanly-flaked flints derived from the occupation-levels which were broken up by this erosion.<sup>1</sup> Moreover, the excavations which were made from

<sup>1</sup> Some of the humanly-flaked flints in the gravel appear to be of the same order as those in the upper occupation-level, but these specimens are by no means numerous.



DIAGRAMMATIC SECTION ACROSS VALLEY, SHOWING POSITION OF FLOORS, ETC.

the lip of the valley, and down its side to where the gravel deposit is exposed, demonstrated that where the lowest floor cuts the surface the first signs of the gravel are observable (Fig. 2), which fact affords further support to the conclusion that the valley has been deepened since the period when these floors were occupied. The diggings have made it clear that the valley was first occupied for a greater or less length of time by a race of people whose various cultural and other remains occur in a well-marked floor. After the disappearance of these people (the author has no reasons to advance for their evacuation of the valley) a layer of peat was deposited in some places over their old floor, and after that an unstratified deposit of stoneless, loamy sand (this deposit assumes sometimes a greyish colour) was laid down on the surface of the peat.

This loamy sand overlay the lower floor wherever it was exposed, and on the north side of the valley the sand can be seen running well up on to the plateau. It is somewhat difficult to account for the deposition of this sand, and two samples forwarded to the Director of H.M. Geological Survey, and reported on by Mr. Herbert H. Thomas, have not helped to solve the problem.

Mr. Thomas's report is as follows:—

*Report on two specimens of Sand sent for examination by Mr. J. Reid Moir.*

"The two samples appear to be exactly the same in appearance and general characters. They are dirty grey sands of uneven grain, containing small pebbles of vein-quartz and some organic matter chiefly in the form of rootlets. They are non-calcareous, but contain a fair quantity of ferruginous matter, and are difficult to clean in acids. The grains were examined after prolonged treatment with acids and after most of the coating had been removed. They were then seen to be of very unequal size. Some of them are well rounded, others, especially those of smaller dimensions, are sub-rounded to subangular. They have a fair polish on their surfaces. They are composed almost entirely of quartz, with a small number of grains of opalescent vein-quartz.

I see nothing in the general character of the sand as a whole to suggest wind action, but certainly some of the grains are of the millet-seed type and carry a high polish. The diversity of grain would point more to deposition by water, and the other characters of the sand, such as the subangularity of a fair proportion of the grains, would point in the same direction.

On the other hand, it is more than probable that the characters of the sand grains (*e.g.*, polish, rounding, etc.) belong to a sand of greater antiquity, from which these grains have been derived. The characters presented by sand grains are so often not original that it would be most unwise to dogmatise on the origin of a sand solely on the shape of its grains. All I can say in this case is that the grains appear to me to have reached their present form by the

action of water rather than by the action of wind. The question of their manner of transport to their present position is quite another matter, and may have modified the original grains to a negligible extent."

As this sand is not stratified, any idea of its deposition by the action of water is not valid, neither does it seem satisfactory to suppose that it represents a hill wash. It may be that it is of aeolian origin. The peat, which, as before mentioned, overlies the lowermost occupation-level, occurs near the ancient springs of water in the sides of the valley. At various places, too, where the lower floor was exposed, it was noticed that roots of trees, commencing from the floor level, were present in the material underlying the floor (Fig. 3). Samples of the peat and roots were forwarded to the late Mr. Clement Reid, F.R.S., who reported that the former contained only a few common British plants, and gave no indication of any climatic change.

The plants found were :—

- Rubus fruticosus.*
- Bryonia dioica.*
- Carduus crispus.*
- Sonchus asper.*
- Solanum dulcamara.*
- Prunella vulgaris.*
- Scirpus sp.*

Mr. Alfred Bell also examined a sample of this peat, and reported that it was "woody and very compact, with a few traces of grass-like leaves and a few seeds. There are no signs of mosses or sphagnum and no shells, but a number of hollow tubes about 6 mm. long (? larva cases); and an occasional elytron (of *Silpha sp.*),

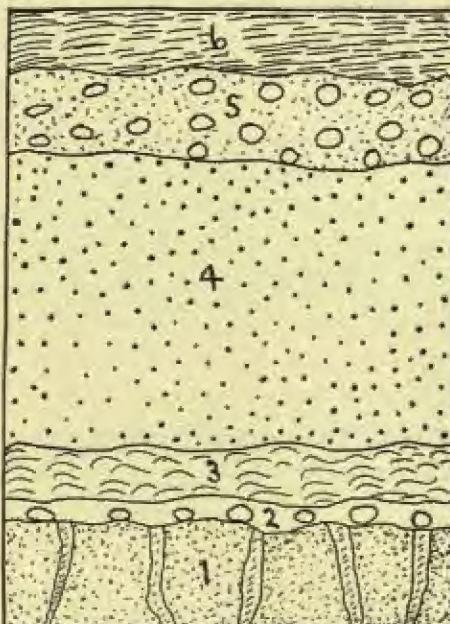


FIG. 3.—SECTION EXPOSED IN FIELD  
WEST OF BRICKYARD.

1. Pure sand with roots.
2. Moustier floor (6 inches).
3. Peat (4-6 inches).
4. Grey sand (2 feet).
5. Red gravel (9 inches).
6. Humus (6 inches).

comprise the animal life. There are very few quartz pebbles." Mr. Clement Reid's opinion on the roots was as follows :—

" I have now examined all the specimens of fossil wood you sent. They all belong to roots (not branches) of oak, which are much decayed and have been penetrated through and through by later root fibres. These later fibres are thoroughly decayed, and probably belong to some marsh plant, but they are quite indeterminable."

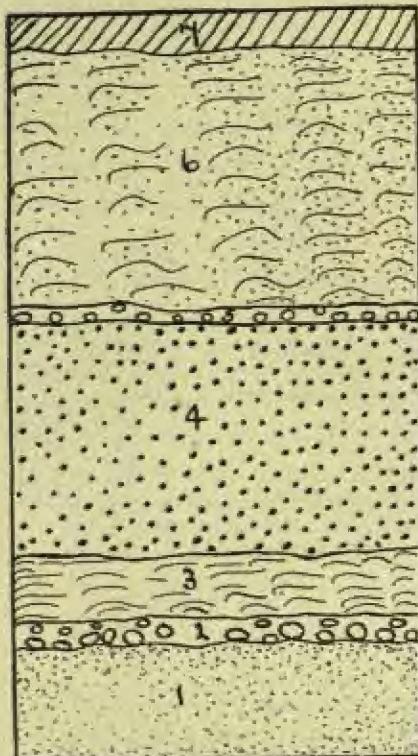


FIG. 4.—SECTION IN ESCARPMENT.

1. Pure sand.
2. Moustier floor (6 inches).
3. Peat (9 inches).
4. Stoneless loamy sand (3 feet).
5. Aurignac floor (3 inches).
6. Stony hill-wash (8 feet).
7. Surface humus with Neolithic arrowhead.

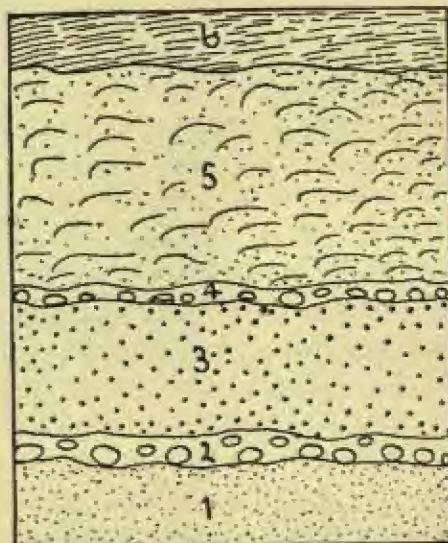


FIG. 5.—SECTION EXPOSED IN NORTH-EAST CORNER OF BRICKFIELD.

1. Pure sand.
2. Moustier floor (4 inches).
3. White sand.
4. Aurignac floor (2 inches).
5. Dark brown sandy material with a few stones (15 inches).
6. Humus (6 inches).

Dr. Rendle, F.R.S., to whom some of the roots were also sent, gave it as his opinion that the majority were oak, but that there was one example present of willow or poplar. Thus all we can gather from this evidence is that the climate obtaining immediately subsequent to the occupation of the lower floor was similar to that of to-day, and while we naturally look for a greater difference of climatic conditions in prehistoric

times, it may be pointed out in passing that the fifty-four species of plants found in association with the famous and ancient *Pithecanthropus erectus* remains are all still living (see *L'Anthropologie*, 1911, p. 46).<sup>1</sup> After the deposition of the loamy sand overlying the peat, another race of people occupied the valley, and in course of time their land surface was covered by a stony, clayey hill wash, which in some places is of considerable thickness. On the southern or left bank of the valley, a small escarpment is developed (Fig. 2) (the author has noticed similar escarpments in several tributary valleys in Suffolk), and at one place where an excavation was made into this escarpment, the lower floor was found to lie about 12 feet below the present land surface and the stony, clayey hill wash to be upwards of 8 feet in thickness (Fig. 4). This superposition of the two floors was not found everywhere in the diggings in the valley, but in the north-east corner of the brick-field and at another site on the south side (Pl. XV, Fig. 1) the two occupation-levels were found separated by the usual loamy sand (Fig. 5). From the foregoing description it will be seen that it is the author's opinion that the valley has been deepened and denuded, since the floors were occupied by man,<sup>2</sup> and as the main valley of the Gipping was almost certainly involved in this process of erosion, it seems probable that some considerable time has elapsed since this erosion took place. But the expert opinion of Dr. Marr is very welcome in regard to this question, and it is given below.

*Report on the Deposits in Bolton & Laughlin's Pits, by J. E. Marr.*

"The geological evidence, apart from that furnished by fossils, is of two kinds, one based upon the characters and thicknesses of the deposits, and the other on erosion which apparently occurred after the deposits were accumulated.

1.—*Deposits.*

I have seen several sections through the deposits of the pits, and especially those in the south-west corner of the great pit. These, as described by Mr. Moir, are :—

1. Surface humus with neolithic arrow-head.
2. Stony hill-wash.
3. A thin floor with flakes.
4. Stoneless loamy sand.
5. Peat.
6. Well-marked floor with implements.

<sup>1</sup> Other examples of "modern" plant remains in ancient deposits have been noted. (See *Memoirs Geol. Survey*, "The Geology of the London District," p. 93.)

<sup>2</sup> This was also suggested by Mr. Henry Dewey, F.G.S. See *Journ. Roy. Anthropol. Inst.*, xlii, 1914, July–December, p. 378. So far as the author's knowledge goes this deepening and denudation marks the close of any recognizable geological activity in the Ipswich district.

These deposits are of considerable thickness, and, with the exception of (I) would appear to have been formed under conditions differing from those now existing in the pit. As they are found on a slope, their accumulation need not necessarily have occupied a long lapse of time. A deposit of gravel in this part of the pit at a lower level than that of the accumulations above described will be noticed later. The floor described by Mr. Moir in the pit in which the "Ipswich Skeleton" was found I have not seen, but have studied the lie of the ground where the floor occurs. The floor is here overlain by 2-4 feet of loamy stuff. As the ground here is approximately level, I believe that some time would be required for the accumulation of the material overlying the floor, which is 2 feet thick on the ridges left by the erosion of the deposits underlying the floor. The extra 2 feet seen in the hollows between these ridges might have been formed rapidly. It is difficult to see how the deposit above this floor could have been formed here under existing physical and meteorological conditions.

### 2.—*Erosion.*

The deposits on the sides of the valley in which the great pit is situated do not extend to the valley-bottom, and the floors cut the surface as one passes down the slopes, and do not lie parallel with that surface, so that there has apparently been erosion since the floors were accumulated. In this connection the occurrence of the floors in little tributary valleys, which hang, as regards the larger valley in which the pit is situated, may have some significance. More important is the occurrence of a gravel at a lower level than that of the floors, as noted above. This gravel is a few feet above the valley-bottom, and I have no doubt that it is a fluviatile gravel, and that the valley has been subsequently deepened between the surface of the gravel and the present valley-bottom. It must be noted that the valley is at present dry, so that conditions have changed since the gravel was accumulated. I understand from Mr. Moir that water-worn flints of the same types as those which occur in the lower floor are found in this gravel. If this is correct it is a matter of considerable significance.

### 3.—*Conclusions.*

Taking all the evidence into account, I believe that considerable changes have occurred since the floors were occupied by man, and that the accumulation was not formed under existing physiographical and climatic conditions. The physiographical changes, however, are on so small a scale that it would be rash to infer that any great lapse of time separated the periods of the floors from our own period. If one asks oneself the question as to whether one would be surprised if it were proved on other grounds that the floors were of neolithic date, one must frankly confess that the answer would be "No." Nevertheless,

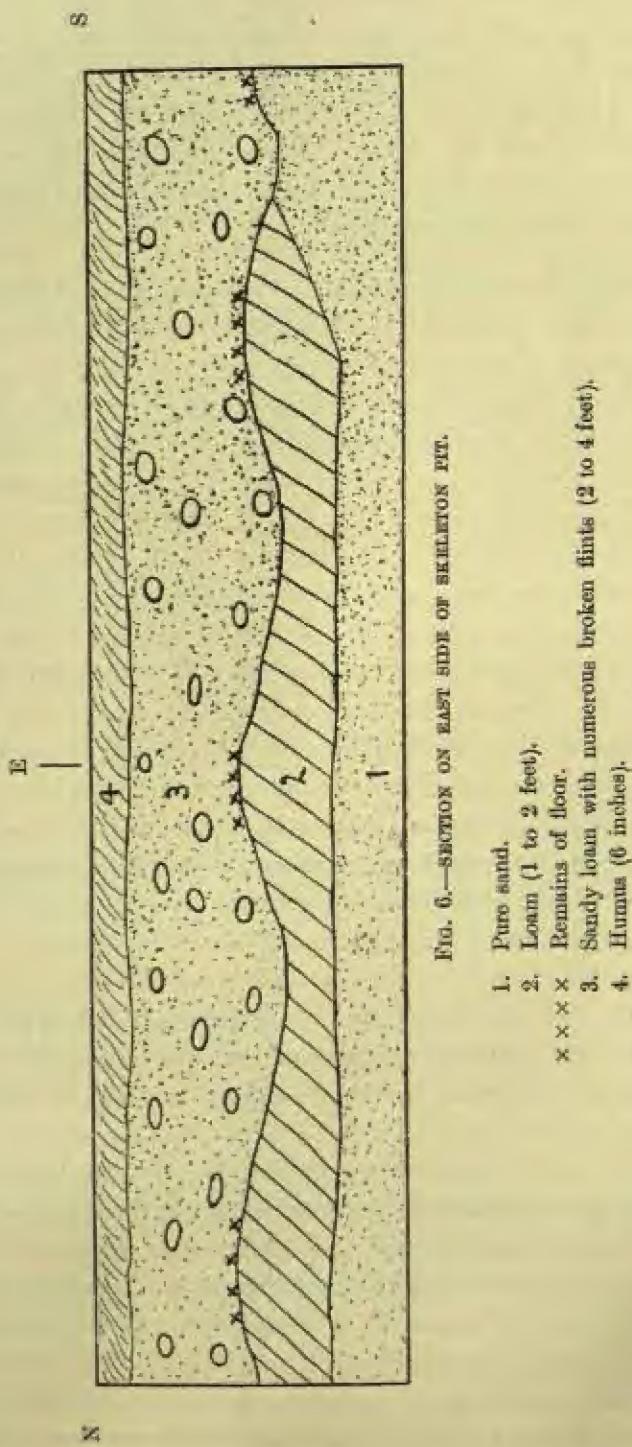
taking into consideration the thickness, characters and variety of the accumulations which lie above the lowest floor, I regard the geological evidence as on the whole indicating a greater antiquity. I have written this brief report at Mr. Moir's request, but it must be remembered that I have only paid brief visits to the pits, and many of the sections which Mr. Moir has made and examined have not been seen by me. Mr. Moir has had far better opportunities of judging of the value of the evidence than I have had, and I hope that he will deal with this evidence independently."

The floor to which Dr. Marr refers as occurring in the pit in which the "Ipswich Skeleton" was found is probably the continuation of the lower occupation-level from the valley upwards towards the plateau (a small series of flint implements and some pieces of pottery (Fig. 42) were found on a more or less well-marked floor at about the level at which the skeleton occurred). The pit in which the above-mentioned human remains were discovered lies on the north or right side of the valley, and at one time was regarded by Mr. W. Whitaker, F.R.S., and by the author, as showing undisturbed though weathered Chalky Boulder Clay overlying Glacial Gravel.<sup>1</sup> But the excavations carried out since the discovery of the human skeleton have convinced the author that the material exposed on the east side of the pit where the remains were found is not weathered Chalky Boulder Clay *in situ*. At the time when the "Ipswich Man" was found the existence of the floors in the valley was unknown, and it was simply by carefully tracing out these floors that it was possible to arrive at the present conclusions regarding the probable age of these remains. The pit has been extended considerably to the eastward since the original discovery was made, and the section now exposed is somewhat different from that seen in 1911. The remains of the ancient occupation-level rest upon a very uneven surface, composed sometimes of loam and sometimes (in the direction of the valley) of glacial sand (Fig. 6).

But the usual loamy sand is observable overlying the floor, except where it has been partially or wholly removed, and its place taken by a material composed of re-made boulder clay, etc., which may best be described as a "sludge." It was under such a sludge (which is very hard and compact) that the "Ipswich Skeleton" rested, and it is the author's opinion that the body was buried superficially in the ancient sandy land-surface which was afterwards covered by the sandy loam, and finally by the above-mentioned sludge.<sup>2</sup> But, as Dr. Marr remarks, it is somewhat difficult to imagine how such deposits could form at the spot where the human skeleton and the ancient floor are found, if climatic and other conditions were the

<sup>1</sup> J. Reid Moir and Arthur Keith, "An Account of the Discovery and Characters of a Human Skeleton found beneath a stratum of Chalky Boulder Clay near Ipswich," *Journ. Roy. Anthropol. Inst.*, xlii, July-Dec., 1912.

<sup>2</sup> See *Nature*, Oct. 12th, 1916. "Pre-Boulder Clay Man."



same as now. The author feels no doubt in stating that such deposits could not be laid down at such a place under existing conditions. The researches which he has been able to carry out over a number of years have had the effect of impressing upon his mind that what are somewhat lightly called "hill washes" are—in a country of low gradients like Suffolk—a very remarkable phenomenon. The only conditions, in his opinion, which would give rise to such deposits would be when masses of snow melted and produced, on a smaller scale, a flowing of the surface soil such as occurred in the Thames Valley and elsewhere, and the resulting deposit of which is known as Coombe Rock. But it seems impossible to imagine such depositions in a climate similar to the present or to that of neolithic times. When, therefore, Dr. Marr expresses the opinion that on geological grounds the floors in the valley under examination might possibly be of neolithic date, the author feels himself compelled to state that, if so, the current notions of the nature and remoteness of this period must be drastically revised. Before completing this portion of the paper the author would like to say something about the actual appearance of the floors exposed in the diggings. The lower floor was found to rest sometimes upon clay and sometimes upon sand. In one place it rested upon very chalky boulder clay,<sup>1</sup> and this clay showed about 9 inches of weathering at its surface. Where the floor rested on sand, the sand was generally discoloured for a few inches at its surface. It was found that the floor was thickest where there was a depression in the old land surface, and where the ancient springs of water existed. In such places the occupation-level was represented by a compact mass, from 3 to 6 inches in thickness, of flints, quartzitic pebbles, etc., containing the cultural and other objects hereafter to be described. The upper floor, as has been explained above, rested upon the loamy sand which was deposited over the lower floor, and the surface of this sand also showed signs of weathering. The upper floor was never so clearly marked as the lower, being composed of similar materials, only in lesser number. At both levels several hearths of varying size were found, and at the lower level sometimes in places now water-logged and quite unsuitable for human occupation.

#### THE HUMAN AND ANIMAL BONES.

The excavations in the south-west corner of the brickfield (Fig. 1) brought to light a large number of animal bones scattered about in the lower floor, and with these in the same scattered manner were found three portions of the human skeleton, viz., a fragment of a skull, a portion of the shaft of a humerus, and part of the shaft of a femur. No bones were found in any other excavation where the lower floor was exposed, nor were bones of any sort found in the upper floor. As has been stated above, the lower floor rested sometimes upon sand, sometimes upon clay, and in one

<sup>1</sup> This boulder clay appears to be an isolated mass, and it may not be actually *in situ* and undisturbed.

place on very chalky boulder clay. The mammalian and human remains occurred almost solely in that portion of the lower floor which rested upon the boulder clay. At this spot the diggings exposed an underground spring, and it seems probable that the ancient people repaired to this particular place because of the presence of water. It was also made clear that the combination of clay and chalk and water had acted as a preservative to the bones, which exhibit a remarkable and peculiar condition of preservation. As the floor was opened up further and further away from the chalky boulder clay area, so the bones became less and less well preserved, until, when the floor in its continuation rested upon dry sand, they had disappeared altogether or were represented by the merest trace of bony material. The author is unable to offer any explanation of the preservative qualities of chalk and clay and water upon bone, but contents himself by stating what is an undeniable fact. The area over which the bones occurred did not much exceed 40 square feet, but in this area several hundred specimens were recovered. Nearly all the bones found were impacted in the layer of flints, etc., forming the floor, and most had been violently fractured for the extraction of marrow.<sup>1</sup> The fracturing process seems to have been accomplished by striking the shaft of the bone a heavy blow with a pebble of flint, and two very obvious bone smashers were found in association with the bones. The author has experimented upon modern bones with one of these flints, and has produced fractures analogous to those observable upon the ancient specimens.

It was evident that the area under description was the actual place where the bones were fractured, as apart from the presence of the flint bone smashers, pieces of fractured bone were in some cases found lying close to the specimen from which they had been struck, while in other cases the two portions were found some distance apart. It was clear that only certain portions of the carcases of edible value were brought home to the "kitchen," as the same particular kind of bone was found in great abundance, while others were rarely if ever present.<sup>2</sup> The horse, red deer and ox (*Bos longifrons*) were evidently the staple diet of these people, and their bones occurred in great abundance. Most of the animal bones have their surfaces scored by cuts due most probably to the use of flint scrapers (the author has produced similar lines on modern bones with a sharp flint), while many have evidently been gnawed by some animal. Some of the specimens show signs of having been hacked and sawn, while two bones have been fashioned so as to present a pointed appearance, and were no doubt used as implements. These mammalian bones are generally of a dark brown colour, and a few show evidences of having been subjected to the action of fire. The specimens were sent to Dr. Charles Andrews, F.R.S., who identified

The skulls also had been broken up, no doubt for the sake of the contained brains.

<sup>1</sup> This has been noticed at other prehistoric sites, see, for instance, Bouyssonie et Bardon.

<sup>2</sup> "La Station Mousterienne 'de la 'Bouffia,' Bonneval, à la Chapelle-aux-Saints," *L'Anthropologie*, xxiv, 1913.

the following animals.<sup>1</sup> (The horse bones were examined by Prof. Cossar Ewart, F.R.S.) :—

<i>Elephas</i> (species ?)	..	..	..	..	Very rare.
<i>Cervus megaceros</i> (?)	..	..	..	..	Very rare.
„ <i>elaphus</i>	..	..	..	..	Very abundant.
„ <i>capreolus</i>	..	..	..	..	Rare.
<i>Equus robustus</i>	..	..	..	..	Very abundant.
„ <i>prjevalskii</i> (?)	..	..	..	..	
„ (species ?)	..	..	..	..	
<i>Bos longifrons</i>	..	..	..	..	Not rare.
<i>Sus scrofa</i>	..	..	..	..	Not abundant.
<i>Capra hircus</i>	..	..	..	..	Rare.

Regarding the large piece of bone referred to above as *Elephas*, Dr. Andrews writes : "I have come to the conclusion that it is probably part of the shaft of a long bone (? tibia) of elephant." Prof. Keith and Mr. M. A. C. Hinton also expressed themselves in similar terms about the specimen. This bone, like the majority of the others, was found impacted in the floor, and is in all probability referable to *Elephas primigenius*. It is evident that the horse bones discovered are of considerable interest, and the following report by Prof. Cossar Ewart is very important :—

#### THE HORSE BONES.

##### *Report by Prof. Cossar Ewart, F.R.S.*

"The horse remains found by Mr. J. Reid Moir during his excavations near Ipswich include thirteen upper and eight lower molar teeth, and part of a lower jaw, several vertebrae, a radius, a tibia, and a metatarsus, and also fragments of limb bones and limb girdles. Is it possible from a study of the teeth, the complete radius, tibia and metatarsus, and the numerous fragments of limb bones, to decide to which of the ancient and modern members of the *Equidae* the horses represented in the Ipswich deposits are most intimately related ? Horses especially differ from other living ungulates in their teeth and limbs. It has been mainly by a study of the teeth and limbs that hippologists have been able to sort horses into a number of more or less well-marked groups.

<sup>1</sup> A few remains of the sheep and fox were found in the surface soil at one spot. These specimens are in a different condition of preservation to the other bones recovered from the floor.

Failing to recognize any fundamental difference between the bones of fossil and recent horses, Cuvier and other naturalists of his time arrived at the conclusion that all the modern breeds and strains of European horses are descended from a common wild ancestor. On the other hand, during recent years American naturalists, by the examination of fossil bones from their Pleistocene deposits, arrived at the conclusion that during a considerable part of the Ice Age seven or more species of *Equidae* flourished in the new world. Half a century ago it was believed that the horses now living under domestication were genetically related to the three-toed Hipparrison frequently met with in the Pikermi deposits near Athens. During the last twenty years it has been once and again asserted that our modern breeds are descended from the wild horse which still survives in Mongolia. Now, however, it is admitted that a species with the highly specialized teeth of Hipparrison could not possibly be the ancestor of either the recent horses, asses or zebras, and sooner or later it will also be conceded that a species with the specialized teeth of the Steppe Horse of Mongolia could not possibly be the progenitor of races with the narrow pillaried molars which characterize Arabs and other slender-limbed breeds. It is now admitted that the cannon bones (metacarpals and metatarsals) of modern horses differ greatly, that they are broad, short, and porous in heavy breeds, but relatively narrow, long, and dense in light horses. But the importance of this difference in the cannon bones is not sufficiently realized, because it is often regarded as due to differences in the environment. As a matter of fact the difference between the cannon bones of a high caste Arab and those of an English Shire Horse is as fundamental as that between narrow and broad pillaried molars. From the size of the molar teeth of a horse it is seldom safe to speculate as to the height at the withers, but as it happens the length of the cannon bones affords a wonderfully safe index of the height and also of the species. The complete metatarsal from Ipswich is 237 mm. in length and 27 mm. wide at the middle of the shaft. The length divided by the width gives an index of 8.77. In having an index of 8.77 this metatarsal decidedly differs from a metatarsal of the same length from the Elephant-Bed at Brighton, in which the length is only 7.2 times the width, as in stout, round-quartered, broad-browed ponies of the "Forest" type. But while the Ipswich cannon bone differs from the cannon bones of coarse limbed ponies, it has the same index, and except in size exactly agrees with the corresponding metatarsal of the English racehorse Stockwell. This implies that it belongs to the fine-boned "Plateau" section of the horse tribe, typical members of which we have in the smaller high caste Arabs. When the metatarsal of the "Plateau" horse measures 237 mm., the metacarpal has a length of about 200 mm. A 200 mm. metacarpal implies, as a rule, a height of 48 inches (12 hands) at the withers; hence we may infer that the Ipswich horse with the 237 mm. meta-

tarsals measured about 48 inches, and resembled in make Exmoor, Iceland, and other ponies of the "Celtic" variety, characterized by a fine head, a tail lock, and by the absence of the hind chestnuts and the four ergots present in Prjevalsky's Horse and in stout ponies of the "Forest" type. During Pleistocene times ponies of the Ipswich variety occurred in various parts of Europe, e.g., about the beginning of the Pleistocene there were slender-limbed 12-hands ponies in Italy, France, and the South of England. Evidence of this we have in the presence of slender metacarpals or narrow-pillared molars in Umbria, Auvergne, and in Kent's Cave near Torquay. Even more interesting than these finds are the bones of a pony with metatarsals of the Ipswich type, from a Bronze Age deposit at Spandau, near Berlin. Fortunately the teeth as well as the metatarsals of this Bronze Age pony were preserved. One of the peculiarities of the six large cheek teeth of the horse is a well-marked enamel fold along the inner aspect of the crown. This fold is known as the anterior internal pillar or protocone. In *Merychippus*, a 40-inch three-toed Miocene pony, the fold or pillar formed an almost complete circle, so small that the crown of the molar was 3.5 times its width. Since Miocene times the pillars of the molars have been flattened, and in some cases increased so much in width that, instead of being less than a third, they are more than half the width of the crown—in *Equus namadicus*, e.g., of the Upper Siwaliks and still later Indian deposits, the crown of molar II is only 1.7 times the width of its pillar. It used to be assumed that horses with a narrow, flattened, internal pillar, died out about the same time as the round-pillared Hipparians. It was further often assumed that the recent horses with broad-pillared teeth had all sprung from narrow-pillared varieties of *E. stenonis*, which ranged from Italy to England at the beginning of the Pleistocene period. But some years ago horses with narrow-pillared molars were found during the excavations of the Roman fort at Newstead in the South of Scotland, and about the same time it was realized that Arabs, Celtic ponies, and many English racehorses had narrow-pillared molars. Owing to these discoveries it is no longer asserted that horses with narrow-pillared molars are extinct, or that all modern horses are descended from *E. stenonis*. Further, it is now admitted that *E. stenonis* may well be regarded as representing not one but several species, at least one of which was characterized by broad, short, cannon bones and broad-pillared molars. In the 12-hands Spandau pony pre-molars III and IV, and molars I and II, have narrow pillars. The corresponding molars from Ipswich have also narrow pillars; the crown of the Spandau pre-molar IV is 2.3 times the width of the crown. The crown of the Ipswich pre-molar IV is 2.7 times that of its pillar. As the pillars of the first two Ipswich molars are also smaller than in the Spandau pony, it may be assumed that the Ipswich molars belong to a less specialized, fine-limbed race, than the Spandau Bronze Age pony. The Ipswich

radius, like the metatarsus, belongs to a fine-limbed race ; it has a length of 321 mm. and a width at the middle of the shaft of 39 mm. Though 60 mm. shorter than the radius of Stockwell, it evidently belonged to a race about 13.2 hands high, built on the lines of a small racehorse. If, as is possible, the radius belonged to the same animal as the nine narrow-pillared Ipswich molars, it follows that the 13.2-hands Ipswich pony was constructed on true thoroughbred lines. Additional evidence of this is obtained by comparing the Ipswich molars with those of the famous racehorse Persimmon. In Persimmon the crown of premolar IV is 2.35, the crown of molar I 2.36, and the crown of molar II 2.07 times the width of their respective pillars. In the Ipswich teeth the corresponding figures are 2.75, 2.45, and 2.08, whereas in a Prjevalsky stallion the crown of pre-molar IV is 1.92, that of molar I, 1.85, while the crown of molar II is 1.92 times the width of the pillar. In addition to the narrow-pillared Ipswich molars, there are two worn molars about which it is difficult to offer an opinion—to say whether they belonged to a member of the ass or horse section of the *Equidae*. Owen, in his work on Fossil Mammals, figures two molars from Oreston, near Plymouth, which he thought belonged to either an ass or zebra that lived in England along with the mammoth. But I pointed out some years ago that the small Oreston molars belonged to a small horse of the "Celtic" type. Prof. Marcellin Boule, who made an exhaustive study of the *Equidae* of the French Pleistocene deposits, came to the conclusion that a small variety of *E. stenonis* which lived in the South of France and North Africa in Pleistocene times might be regarded as an ancestor of zebras of the Burchell type, and the Abbé Breuil has reproduced an engraving by a Palaeolithic artist, which indicates that an ass of the Kiang race lived in France during the early Stone Age. Nevertheless, until better evidence is forthcoming we are not justified in assuming that either asses or zebras reached England during the Pleistocene period. There is yet another tooth from Ipswich which deserves mention, namely, a third molar with a very broad pillar. In a 12.2-hands Prjevalsky pony the last molar may measure 33 mm. and have a pillar 15 mm. broad. In a 12.2-hands typical Iceland Forest pony, the crown of the last molar may measure 27 mm., and have a 15 mm. pillar. In *E. namadicus*, with the last molar measuring 30 mm., the pillar may be 18 mm. wide. In the Ipswich last molar the crown measures 33 mm., and the pillar has a width of 18.5 mm. In other words, the crown of the Ipswich third molar is 1.78 times the length of the pillar, whereas it is 1.66 in *E. namadicus*, 1.80 in the Iceland, and 1.86 in the Prjevalsky pony. Evidently a comparison of last molars of various types fails to settle the question whether the broad-pillared Ipswich molar belonged to a member of the "Forest" or to a member of the "Steppe" type.

At the end of the Ice Age—or at least in post-glacial times, the reindeer,

arctic fox, lemming, marmot, and other members of the Tundra fauna, ranged as far north as Sutherlandshire. It is hence possible that Prjevalsky's Horse, the Saiga antelope, and other steppe forms found their way into England. Some years ago Nehring pointed out that during the post-glacial epoch, when forests were spreading in all directions, various members of the steppe fauna continued to inhabit parts of North Germany. If steppe horses were common in Germany at the close of the Ice Age, it is conceivable that as the steppe areas were reduced on the continent, small isolated herds of horses may have found their way into England to occupy for a time the open spaces between the ever expanding forests. In support of the view that a steppe horse found its way into England, it may be mentioned that there are cannon bones in the British Museum from Essex labelled *E. fossilis*, which are practically identical with the corresponding bones of some of the wild horses imported by the Duke of Bedford from Mongolia. Further the Ipswich tibia, and some of the fragments of limb bones, approach very closely the Prjevalsky type. But until we know more about the living members of the Steppe Horse, and have more material from English Pleistocene and still later deposits, it will be impossible to say definitely whether a horse of the Prjevalsky type reached England during either the glacial or the post-glacial period. That some of the fragments of the limb bones from Ipswich belong to a member of the 'Forest' race is certain, but it is impossible to say to which variety of *E. robustus* they severally belong, or yet to give even approximately the size of the varieties represented. Some of the fragments seem to belong to a stout 12-hands pony like the one found in the Elephant-Bed at Brighton; others probably belong to a somewhat finer strain allied to the horse of Solutré, while other fragments probably belong to a race found in the Grotte du Prince at Grimaldi, which had relatively broader cannon bones than the modern English Shire Horse. Although some of the coarse-limbed Ipswich horses were of a considerable size, they were all smaller than a 'Forest' horse from the diluvial deposits at Magdeburg and than a horse belonging to the same type and period found near Berlin, which measured nearly 15 hands at the withers.

"A study of the Ipswich equine bones lends support to the view that before the end of Pleistocene times we had in England material out of which both light and heavy breeds, racehorses, as well as heavy draught horses might have been established, without the importation of members of either Oriental or of Occidental breeds."

It is thus evident that in these remains are represented more than one ancient type of horse and that the whole fauna of the lower floor is referable more or less to a "Forest" period. It seems also from the types of horses present that though the forest variety is predominant, the later steppe type has begun to make its appearance.

Such a forest period did not possibly differ greatly in climate from that of the present day, and it will be remembered that the evidence afforded by the peat and fossil wood found pointed to a similar conclusion. This mild forest period was followed in course of time, if the author has interpreted the geological evidence correctly, by a condition of low temperature, which was responsible for the deposition of the sludge which in places buried the upper occupation-level. It will be noticed that the fauna is of a somewhat unusual character, inasmuch as the mammoth and ancient forms of horses are seldom found with *Bos longifrons*, the pig and the goat. But a number of instances of the bones of the three latter animals being discovered in Pleistocene deposits are on record,<sup>1</sup> and as the specimens from the lower floor were found in intimate association with the remains of the other mammals and exhibit the same condition of preservation, etc., it is clear they are referable to one and the same period. As has been stated earlier in this paper, the state of preservation of the animal and human bones discovered is peculiar, in that the specimens do not present the usual degree of difference from their original condition so often seen in fossils from river gravels and similar deposits.

The author has for some time past collected specimens of bone from different beds in various parts of this country and the continent of Europe, and the examination of these specimens has convinced him that the condition of preservation of any bone depends entirely on the nature of the immediately surrounding material. It seems that in some cases bones of no great antiquity may rapidly become "mineralized," while other ancient examples, because of the unusual nature of the deposit in which they are embedded, may never attain to such a condition of fossilization. There seems no doubt that the surroundings of the lower floor in the south-west corner of Messrs. Bolton & Co.'s brickfield afford a case in point. The bones found at this spot, though undoubtedly ancient, do not exhibit an advanced state of mineralization, as the following analysis of three typical specimens will show; this analysis has very kindly been made by Messrs. E. Packard & Co., Ltd., of Bramford, near Ipswich, and by comparing it with that of modern "green" bones, also given below, the reader will be able to see how much organic matter has been lost by the ancient specimens.

<sup>1</sup> *Bos longifrons*. *Memoir Geol. Survey*, "The Geology of the London District," pp. 86 and 93; J. Allen Brown, "Palaeolithic Man in N.W. Middlesex," p. 66; Owen, *British Fossil Mammals and Birds*, pp. 508 and 515.

*Sus Scrofa*. Owen, *British Fossil Mammals and Birds*, pp. 426 and 431. Römer,

"The Bone Caves of Ojców." *Archæologia*, lxxv, p. 191 (translated by Lee).

*Capra hircus*. *Journ. Roy. Anthropol. Inst.*, vii, pp. 183–5. Owen, *British Fossil Mammals and Birds*, pp. 489–90.

## RESULT OF ANALYSIS OF BONES FROM LOWER FLOOR.

	No. 1	No. 2	No. 3
Moisture ... ... ...	9.62	8.67	7.20
*Organic Matter ... ...	19.66	21.63	20.85
**Phosphoric Acid ... ...	20.09	26.92	26.03
Lime ... ... ...	29.23	35.05	36.42
Oxides of Iron and Alumina, Carbonic Acid, etc. ... ...	7.90	6.68	6.65
Silica ... ... ...	13.50	1.05	2.85
	100.00	100.00	100.00
*Nitrogen ... ...	2.28	2.78	2.78
Eq. to Ammonia ... ...	2.77	3.38	3.38
**Phosphate of Lime... ...	43.85	58.77	56.82

No. 1 contains a very small quantity of gelatine.

## RESULT OF ANALYSIS OF "GREEN" BONES.

	Per Cent.
Moisture ... ... ... ...	8.40
*Organic Matter ... ...	30.78
**Phosphoric Acid ... ...	24.04
Lime ... ... ...	32.45
Oxide of Iron and Alumina and Carbonic Acid ... ...	4.00
Silica ... ... ...	.33
	100.00
*Nitrogen ... ...	3.94
Eq. to Ammonia ... ...	4.80
**Eq. to Phosphate of Lime ... ...	52.47

As the human bones discovered are in precisely the same condition of preservation, etc., as the animal bones, the conclusions arising from the above analysis apply to the human remains also.

*The Human Bones.*

The fragmentary human remains recovered were found impacted in the lower floor, and in intimate association with the mammalian bones described above. The author was present when each of the human bones was found, and noted that they were lying about  $3\frac{1}{2}$  to 4 feet below the surface of the ground, and covered by the usual sandy loam, which at this particular spot was of a dark greyish colour. The human fragments were lying at a distance of about 4 yards apart, and appeared to have been thrown down upon the old land surface in the same careless manner in which the mammalian bones were discarded. (The humerus had been broken in ancient times

and was found in two pieces.) The site where the bones occurred is, as has already been stated, near an underground spring, and it is evident that the remains of hearths, calcined flints, implements, flakes and red ochre (?) which were discovered point to the place being an undoubted camping ground of the ancient people who then occupied the valley. It was no doubt here that the food was cooked, and the bones scraped with flint knives or scrapers, and an examination of the mammalian remains shows that nearly all of them are scored by the marks of sharp-edged flints. An examination of the shafts of the human humerus and femur demonstrates that these bones also are scored with the same kind of marks, and as both exhibit signs of having been gnawed, it would appear probable that the ancient people inhabiting the valley indulged occasionally in human flesh as food.<sup>1</sup> The human bones were sent to Prof. Arthur Keith, F.R.S., and his report is given below:—

*Report on Human Remains, by Arthur Keith, F.R.S.*

"The discovery of human remains in strata containing the evidence of a Mousterian culture is a matter of great interest and importance to British anthropologists. In every instance in which human remains have been discovered in strata bearing a Mousterian culture on the continent these remains have been found to belong to a special genus or species of man—*Homo Neanderthalensis*. Not any certain trace, in my opinion no trace, of Neanderthal man has yet been discovered in Britain. This is the first occasion in which human remains have been found in our country embedded in undisturbed strata, which on cultural evidence can be assigned to the Mousterian period. The question which the anthropologist has to answer is this: Are the remains which Mr. Moir has discovered those of Neanderthal man, or of the type of man which still survives in Europe, *H. sapiens*, the modern type of man? A minute examination and detailed comparison of these remains with corresponding bones of the Neanderthal and Modern types leaves no doubt in my mind that the remains discovered by Mr. Moir must be assigned not to the Neanderthal, but to the Modern type of man.

"The decision was not easily arrived at, for the following reasons. Parts of only three bones are found: (1) A fragment from the upper part of the occipital bone of the skull (Pl. XV, Fig. 2), measuring 38 mm. in its longest or sagittal diameter, by 30 mm. in width or transverse diameter; (2) about four-fifths of the shaft of a left humerus, the articular extremities and the upper fifth of the shaft being absent (Pl. XV, Fig. 3); (3) three-fourths of the shaft of a right femur, the extremities and adjacent parts of the shaft being missing (Pl. XV, Fig. 4).

<sup>1</sup> A similar conclusion was arrived at by Kramberger, *Der Mensch von Krapina*, Wiesbaden, 1906.

The most characteristic features of the bones of the extremities of the Neanderthal type lie in their extremities. They are particularly massive in relationship to the shaft. In the femur and humerus which Mr. Moir found these diagnostic aids were missing: we have to rely entirely on the characters of the shafts. These three fragments certainly do not belong to one individual. The humerus is slender, with weakly developed muscular impressions, and is apparently that of a woman. The femur, as will be seen from the measurements, is stout, short, with marked muscular impressions, and is almost certainly that of a man.

"The fragment of the skull is thick and more likely to be derived from a man's skull than from that of a woman. We have certainly to deal with parts of two individuals, perhaps of three. The fragments are all in the same state of preservation—indeed, they are identical in colour and in state of preservation with the animal bones found in the same strata. The bones, with the exception of the occipital fragment, show no tendency to crumble, nor are they heavy or deeply mineralized; they are of a tawny brown in colour, and retain the hard dense texture of bone. Their surfaces are covered with fine scratches, the origin of which I am uncertain of. The upper end of the humerus shows distinct marks of having been bitten or gnawed. The *occipital fragment* represents the apical part of the squama, being marked on its convex or upper border by digitation of the lambdoid suture (Pl. XV, Fig. 2). As may be seen from the figure it bears on its inner surface the impress of the superior longitudinal sinus, which lies, as is normal in human skulls, to the right side of the internal crest. At its upper part it is thick, 11 mm., at its lower part it measures 7 mm. in thickness. There is not sufficient of the bone preserved to afford any certain basis for a conclusion as to whether it is from the skull of an individual of the Neanderthal or of the modern type, but I found it easier to match the fragment in skulls of the modern type than in those of the Neanderthal type.

"The humeral fragment measures 242 mm. From comparisons with complete bones of similar build, I came to the conclusion that the original length must have been about 315 mm., such a humerus as we find in a slender woman with a stature of 1550 mm. (5 feet 1 inch). Now, the outstanding features of the shaft of the Neanderthal type of humerus, such as have been described by Klaatsch,<sup>1</sup> Gorganovic Kramberger,<sup>2</sup> and Boule,<sup>3</sup> is that it is remarkably straight, and tends to preserve (as seen on transverse section) a cylindrical form, as in anthropoid apes, and has well-marked muscular impressions. In modern man, particularly in ancient men of this type, the lower end of th-

<sup>1</sup> H. Klaatsch, *Prähistorische Zeitschrift*, 1910, Bd. I, p. 285.

<sup>2</sup> K. Gorganovic Kramberger, *Der diluviale Mensch von Krapina in Kroatien*, Wiesbaden, 1906.

<sup>3</sup> M. Boule, *Annales de Paléontologie*, 1911, vi, pp. 1-270.

humerus tends to bend forward as it approaches the elbow joint, and to assume throughout a prismatic shape, as seen on section. The photograph (Pl. XV, Fig. 3) shows the prismatic form in Mr. Moir's find, a trace of a supracondylar process will also be observed. The medial epicondyle (M.E.) is also preserved : it is not specially prominent as in the Neanderthal type of humerus —indeed, it is very easy to get amongst humeri derived from prehistoric burials humeri which match this specimen exactly.

" The slenderness of the bone may be judged from the fact that at the deltoid impression the antero-posterior diameter is 18.5 mm., its transverse or mediolateral 15 mm. At the mid-point of the shaft the corresponding diameters are 18 by 17 mm.

" *The femoral fragment* presents a more difficult problem. As will be seen from the photograph (Pl. XV, Figs. 4 and 5), the part of the femur into which the gluteus maximus is inserted (G.I.) is drawn outwards (laterally) to form a flange or projecting margin. Such a flange occurs in all femora of the Neanderthal type, but it is also usually present in prehistoric femora of the modern type, and may be seen in quite recent femora. But there is present in the femur found by Mr. Moir one character which has never been seen in femora of the Neanderthal type, but often in prehistoric femora of the modern type. That character is best realized when a section is made across the upper part at the line indicated in Pl. XV, Fig. 4. The section is shown in Fig. 7 with the corresponding section of a femur of the Neanderthal superimposed. The sections were made below the level of the trochanter minor, but that structure has been introduced to show the relatively massive size of this process in the Neanderthal femur. The Neanderthal femur, as is the case in all the long bones of this type, tends to preserve the anthropoid cylindrical form, particularly in the upper part of the shaft (see Fig. 7). In modern man, particularly in prehistoric skeletons, there is a marked tendency to flattening of the upper part of the femur, a flattening from front to back.

" With this flattening there is produced a distinct flange or flattened buttress of bone, which ascends from the inner part of the shaft of the bone to its neck in front of the small trochanter (see Pl. XV, Fig. 4 and Fig. 7). The flattening and the flange are both well marked in Mr. Moir's specimen. The characteristic mark of the Neanderthal type is absent; those of the modern type are present. At the line of section (Pl. XV, Fig. 4) the transverse diameter in Mr. Moir's specimen is 35 mm., its anteroposterior diameter 25 mm.; in the femur of the Neanderthal type found at Spy, the corresponding measurements are 37 mm. and 32 mm. There is a similar difference to be observed when sections are made across the middle of the two types of femora (Fig. 8). The Neanderthal type tends to assume a cylindrical form, with a weakly marked linea aspera (Fig. 8); the modern

type a front to back flattening, with a more pronounced development of the linea aspera. At this point the antero-posterior diameter in Mr. Moir's specimen is 29 mm.; its transverse diameter 29 mm. The corresponding measurements in the Neanderthal type are 31 mm. by 31 mm. They give the same proportional indices, but they are really very different in form and character. The fragment of femur found by Mr. Moir measures 293 mm.; from comparison with other femora of the modern type, femora showing similar characters and proportions, I infer that its original length was between 435 and 440 mm., indicating a stature of about 1620 mm. (5 feet 4 inches). A stoutly-built man of low stature. It will thus be seen that if Mr. Moir succeeds in establishing that the cultural objects found in the stratum must be regarded as of the Mousterian period, and if the bones are contemporary with these objects, then we can draw the definite conclusion that the people who made the upper Mousterian implements in England were of the modern type."

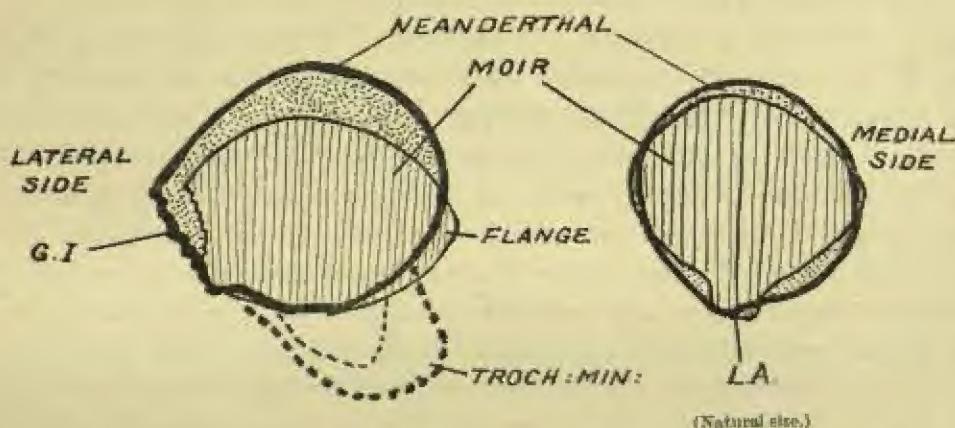


FIG. 7.—SECTION ACROSS UPPER END OF FEMUR (SHADED).

The thick outline with stippled interior is a corresponding section of a Neanderthal femur.

FIG. 8.—SECTION ACROSS THE TWO TYPES OF FEMORA.

L.A. = Linea aspera.

The human bones were also examined by Dr. W. L. H. Duckworth and his report is as follows:—

#### NOTES ON BONE FRAGMENTS SENT BY J. REID MOIR, ESQ., FEBRUARY, 1917.

By Dr. W. L. H. Duckworth.

"(a) Fragment of Humerus. In March, 1916, I sent to J. R. M. a modern bone of almost identical conformation. The 'Ipswich' specimen has a supra-condylar spur, but this may be present in modern humeri.

"(b) Cranial fragment: unusually thick, but not beyond the range of variation exhibited by modern skull bones. The fragment seems to be the extreme anterior part of an occipital bone.

"(c) Part of the shaft of a femur. This is surprisingly stout, if it belongs to the same skeleton as the humerus 'a.' The bone is finely scored in several places, and the irregularity of the upper end suggests to me that the bone has been gnawed in this part. The chief distinctive features of this fragment are at its upper end. Here the rough area for the gluteus maximus is flanked laterally by a flange-like process extending outwards laterally from the surface of the shaft. The upper part of the rough 'gluteal' area almost constitutes a 'third trochanter.' Comparisons were made as follows:—

"(1) Twelve modern femora (taken at random) do not show the combination of (a) flange, (b) marked gluteal excrescence, (c) platymeria or flattening of the shaft at this level. Many modern femora with pronounced gluteal areas combine this feature with a more cylindrical shaft and no flange.

"(2) Cast of the femur of the 'Tilbury' skeleton. This femur bears (a) the flange, (b) the marked gluteal excrecence, but with less definite flattening. There is a 'third trochanter' in this bone.

"(3) In the casts of the 'Cromagnon,' 'Spy' and 'Neanderthal' femora, and in a femur found in a cave (S. 2) at Gibraltar in 1912, the flange (a) is very distinct. The Spy femur provides the closest resemblance to the Ipswich bone in this respect. But the shaft in these specimens is admittedly not so flattened (antero-posteriorly) as in the Ipswich bone. The cast of the femur of the so-called *Homo mousteriensis hauseri* provides no reliable evidence on these points. The foregoing specimens are all (with the exception of the Gibraltar bone) referred to the Palæolithic period, and I have no others of that period with which to compare the Ipswich bone.

"(4) The Galley Hill femur (cast) at first sight presents no resemblance at all to the Ipswich bone. But a careful inspection shows that as regards (a) the flange, the Galley Hill bone has been eroded (probably by the disintegrating action of water bearing vegetable acids) so that a small flange may have been present. But no certainty exists as to this. On the other hand, the Galley Hill femur has a flattened or platymeric shaft, which may be set to the credit of its resemblance to the Ipswich bone.

"(5) Two (modern) aboriginal Australian femora (out of five examined) show (a) the flange, but they are not so flattened as the Ipswich bone.

"(6) Two Mori-ori femora have (a) the flange well marked, but these are much more slender bones, and resemblance ceases with the point mentioned.

"(7) Femora of Bush and Andaman aborigines provide no distinct evidence of similarity to the Ipswich bone.

"(8) Femora of gorilla and chimpanzee sometimes have (a) the flange well developed. They have not (b) a prominent gluteal area and (c) the character of flattening is variable, though often distinct (more so in Orang-utan than in the foregoing). On the whole the conformation of the Gorilla femur by reason of the stoutness of the bone in that animal shows the greatest resemblance to the Ipswich bone. But there is no suggestion that in other points the Ipswich femur approaches that of the anthropoid ape. The point of immediate interest is that the Ipswich femur differs from the Spy and Neanderthal bones in regard to the form of the shaft just below the lesser trochanter, for the shaft is here flattened in the Ipswich bone, but not in the others mentioned above. In the same way the Ipswich bone fails to find complete analogy with the cave bone from Gibraltar and the Australian femora compared with it. Until a femur of Mousterian antiquity with a more flattened shaft than the Spy and the Neanderthal femora is available so as to be put in evidence, it will not be possible to refer to the Ipswich femur as 'Mousterian,' in the whole of its osteological characters."

It is evident that there is a slight difference of opinion between Prof. Keith and Dr. Duckworth as regards the exact signification of some of the characters of the femoral shaft discovered. The former appears satisfied that the bone cannot be referred to the Neanderthal type, and that it is of "modern" conformation, while the latter prefers to regard the specimen as not Mousterian "in the whole of its osteological characters." But it is a somewhat remarkable fact that while the men who made flint implements of upper Le Moustier type in France and Belgium<sup>1</sup> were typically Neanderthal, the makers of the same kind of implements in Suffolk (it is the author's opinion that the specimens from the lower floor are referable to this period) were of the modern type.

#### THE FLINT IMPLEMENTS AND POTTERY.

The excavations carried out showed that the lower floor had the greatest development and extent. It was thickest in slight depressions where springs of water issued on the old land surface, and at such spots humanly-struck flints, quartzite hammer-stones, etc., were sometimes extremely numerous. In several places large hearths—1 to 2 feet in thickness—were met with, and associated with these hearths were numerous calcined flints and an abundance of small pieces of some red pigment (? ochre). In this lower floor, at various places in the valley, were found fragments of very rough and primitive pottery. The comparatively numerous specimens of this pottery which were found impacted in the lower floor, and which were in many cases removed by the author with his own hands, makes it quite certain that such

<sup>1</sup> Bouyssonie et Bardon, "'Le Station Mousterienne' de la 'Bouffia' Bonneval à la Chapelle-aux-Saints," *L'Anthropologie*, xxiv, 1913. *Annual Report Smithsonian Institution*, 1913, p. 522.

specimens are of the same age as all the other relics from this level. There are no grounds for imagining that these pottery fragments may be of a later age, and that they had been introduced into the lower floor after its occupation by man. The implements, etc., from the lower level are all unpatinated, unscratched, unabraded, and unrolled, and it is evident that their makers procured their raw material from the Chalky Boulder Clay and Middle Glacial Gravel of the district. The stones from these deposits were no doubt to be found upon the surface of the ground, as they are at the present day, and an examination of the original patinated and stained surfaces of the flints from which the implements were made, makes it clear that such surface flints were picked up and flaked by the occupants of the lower floor. These flints, however, were small and of poor quality, and this had a marked effect upon the implements made from them.

The upper floor was never so well developed or of such wide extent as the lower. No pottery fragments or bones were met with at this level—though one or two extensive hearths with numerous calcined flints occurred. Pieces of red pigment were found in places. The flint implements and flakes of this upper level, which are of an entirely different character to these from the lower floor, are unabraded, and their edges and angles are quite sharp. But a number of them are stained a chocolate brown colour and some exhibit a well-marked lustre. Others are patinated a light blue, while a few show no signs of staining or patination.

It has been somewhat difficult to decide from whence these ancient people, occupying the upper floor, procured their raw material for implement making, as the flint is of good quality and not easily referable to any local flints known to the author. It is his opinion that the implements of the upper floor are of the Aurignac type. In the hill-wash overlying the upper occupation-level two implements have been recovered, which by their type and flaking must be assigned to the early Solutré period, while in the surface humus a barbed and tanged arrow-head has been found, such as is usually considered to be of neolithic date. It will thus be realized that the implements found at the various levels in this small valley near Ipswich follow an orderly sequence, with which English archaeologists have become familiar by discoveries in the cave deposits of France and Belgium.

With a view of getting an expert and unbiased opinion on the various flint implements discovered, a typical series was forwarded to Prof. V. Commont of Amiens, whose intimate and extensive knowledge of the early and late palaeolithic industries makes him an excellent judge in such matters. When forwarding the specimens, the author took great care to inform Prof. Commont of all the details of the discovery—the geological position of the implements and the nature of the associated relics such as pottery, etc.—so that he was in possession of all the facts when writing the report, of which the following is an accurate translation.

NOTES ON WORKED FLINTS FROM THE DEPOSIT IN A DRY VALLEY OF THE RIVER GIPPING (ENGLAND).

By Prof. V. Commont.

"I. *Industry of the lower level.*—The industry coming from the lower band of gravel under the peat belongs, certainly, to an horizon of the Upper Mousterian. The relative smallness of the implements is due to the bad quality of the flint. The nodules of flint out of which the prehistoric people chipped their implements come :—

"1. From the chalk-flint rolled in the alluvium (doubtless of the Middle Glacial Gravel), to judge by the smashings or star-fractures, which I have observed on the crust or cortex of the flint, and which are due to the numerous shocks to which the flints were subjected in their transport; and

"2. From the green-coated flints at the base of the Thanet Sands, which in France, and also probably in England, consist of a black homogeneous 'paste' inside, and outside are of a chestnut colour. This flint flakes very easily, but (like the nodules) runs small and can only yield small chips and small blades. On the other hand, certain flints show a slightly bluish white patina, of earlier date, on the chipped lumps of flint. This patina exists in France on the rolled flints of the alluvium.

"II. *Industry of the upper level,* found in the (thin band of) gravel at the base of the stony, clayey hill-wash which is equivalent in France to the *limon de lavage* (hill-wash loam) : it is clearly Aurignacian. It should be noticed that the numerous Aurignacian levels of the caves of central France do not correspond to different geological epochs, and that several such levels form only one horizon in the loams of North France, Belgium and South England. The same applies to the subdivisions of certain Mousterian deposits, La Quina, etc.

"Two of the implements found at  $3\frac{1}{2}$  feet from the surface, at the base of the stony clay,<sup>1</sup> are evidently proto-Solutrean or rather lower Solutrean. (When visiting Dr. Sturge's remarkable collection in 1913, I observed that there were some Solutrean points, and some Aurignacian, noticed also from Dartford Heath, in the collection of Mr. Davis, the schoolmaster there.) I also examined, in 1914, a series of Aurignacian flints for Mr. Chandler (from the river clay).

"You have therefore made a remarkable stratigraphical discovery which absolutely corroborates my finds in the loams or alluvium of North France, Belgium (deposit of Andenne, not yet published), and the Charente Valley at Angoulême : viz. :—

- C. Lower Solutrean.
- B. Typical Aurignacian.
- A. Upper Mousterian.

<sup>1</sup> There might be some misapprehension in reading Prof. Commont's statement in regard to this matter. The implements were found actually in the stony, clayey hill-wash.

*Remarks on the Implements.*

" I. *Lower level (Mousterian)*.—Typical Levallois flakes (Fig. 10), but small like the cores : the flint not homogeneous, the 'paste' showing grey patches (due to alumina) in a black or chestnut body ; this flint flakes badly. Two small *coups de poing* (hand-axes), in jasperoid flint transparent and waxy (Fig. 22), the other has its under face flat (natural fracture), with older patina, bluish-milky white (Fig. 23). Small *radoirs* (side-scrappers) ; the largest in black flint is at the same time a *burin* (graver) ; a blow aimed at the end has detached a blade (the 'coup du burin') and produced a graver (see the lower face) : it is therefore a scraper-graver (Fig. 11). Another small side-scraper has a kind of point at the end, on the right (Fig. 14).

" 'Points' (what are generally called Mousterian points, are more often double side-scrappers). Your 'points' are true points (graver-points) ; one, of flint patinated greyish white, has the appearance of certain implements slightly rolled, found in the alluvial deposits (Fig. 21).

" Gravers, a graver on a blade of chestnut flint with ferruginous concretions at the base.

" End-Scrapers, very fine. One of lustrous waxy flint, chipped on the lower face, is quite Mousterian (Fig. 24). (One of the four without lustre, looks neolithic.)

" II. *Upper level (Aurignacian)*.—Core-scrappers identical with those I found at Conty (Valley of the Selle) ; one has bluish patina veined with white lines, Aurignacian of Belloy-sur-Somme (Fig. 29). These are probably planes.

" End-Scrapers : a thick scraper and one on a blade (Fig. 35), which is indeed of the Reindeer period.

" Gravers : busked gravers (Fig. 37) and nosed scraper (Fig. 33), both Aurignacian.

" III. *Lower Solutrean*.—A saw, very pretty, in all respects similar to that of the same horizon found at St. Acheul and figured in *Les Hommes contemporains du Renne* (Fig. 148-1) (Fig. 39).

" Lower Solutrean point, fairly broad, same type as that found at Conty (*ibid.*, Fig. 148-3) (Fig. 38). These two specimens are remarkable.

" Bones : the tibia fragment is fossilized but little.

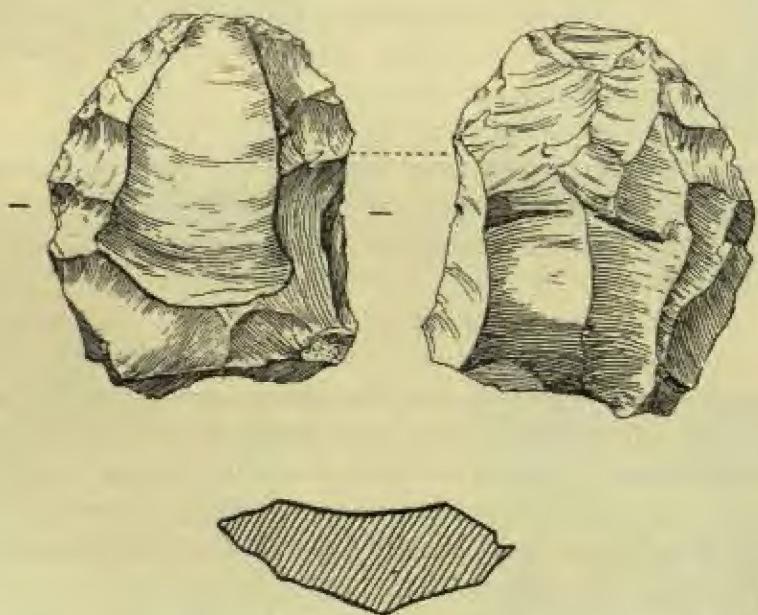
" Pottery : one of the fragments has been made with sandy clay, in which was incorporated fragments of quartz to prevent warping or contraction in firing (as it appears). Can this be the first stage in the manufacture of pottery ? In France Dr. Henri Martin has observed palæolithic pottery in the Madaleine deposit at Jablines (Seine-et-Marne). After all there may well be palæolithic pottery.

" Implement resembling a neolithic chisel (Fig. 28), pseudo-hand axe, broken, from the lower level.

" Notice the hollow flaking at the rounded base, which shows it is *not* a neolithic chisel.

" It is difficult to compare the deposits of the dry valley you have explored for two years with the Somme Valley loams, because the latter are peculiar on account of a chalky subsoil, which is seen also in the Thames Valley at Erith, Crayford. Still I can say that the upper level (stony clayey hill-wash) evidently corresponds to our hill-wash loam (*limon de lavage*), which is marked A<sup>1</sup> on my sections ; and to the brick-earth marked A (the two united) : and the second layer of clayey sand corresponds to the upper part of the Upper Ergeron B. of Montières.

" At Andenne, a little Belgian town in the Meuse Valley, I discovered in 1913, in company with my good friends Hamel-Naudrin and J. Servais, archaeologists of Liège, an Aurignacian deposit in a thin gravel seam (*cailloutis*) at the bottom of a deposit like your stony, clayey hill-wash. If I had had more time, I might have published a little note on these Aurignacian deposits in Belgium and the North of France, and, I should have added, in the south-east of England."<sup>1</sup>



(Natural size.)

FIG. 9.—LOWER AND UPPER VIEW AND SECTION OF SMALL "TORTOISE-CORE"  
The flake-scar resulting from removal of the flake-implement is clearly outlined.

<sup>1</sup> Professor Commont's views are thus seen to corroborate the opinions arrived at by Mr. Reginald Smith and the author in their two papers published in 1913 and 1914.

Mr. Reginald Smith, who has examined the flint implements mentioned above, and who has read the report, has informed the author that he is in agreement with

Professor Commont's views. The author now proposes to give a short account of the various types of implements found at the different levels, and a description of the manner in which they were made.

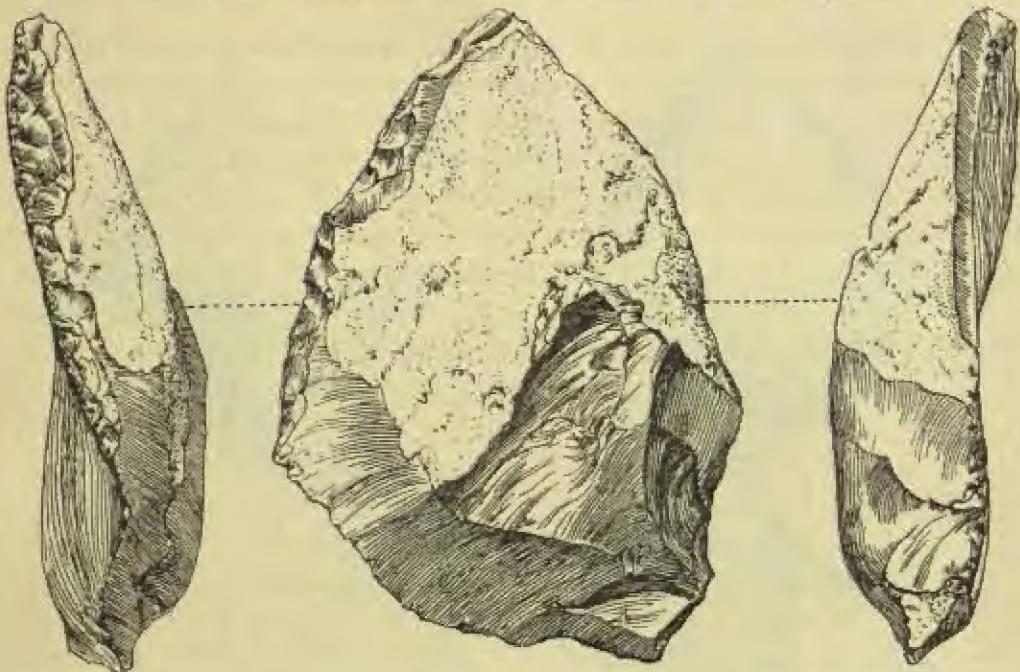


FIG. 10.—SMALL FLAKE-IMPLEMENT, SHOWING FACETTED STRIKING-PLATFORM (BELOW).

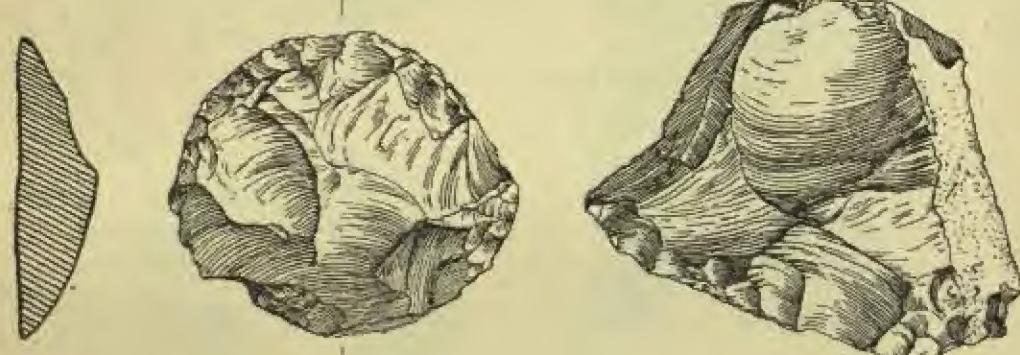
*Industry of the lower level.*—The method of manufacture of the implements found at the lower level consisted in the removal of flakes from nodules of flint, and of fashioning these flakes into the desired implement. In many cases natural flakes of thermal origin were utilized, and by the frequent occurrence of such flakes at the lower level, associated with numerous remains of hearths and calcined flints, it seems possible that the raw material was broken up by the action of fire, and the resulting pieces worked up into implements. That such a procedure is possible has been proved by the author by experiment.

The true nuclei or cores found at the lower level were not numerous, but such as have been recovered

demonstrate that flakes were removed in all directions from the parent block, quartzite pebbles being used as hammer-stones. The "tortoise-cores," as they are called, from which the flake-implement was struck (Fig. 9), are of quite a different order from the ordinary nuclei just described. These tortoise-cores were not numerous, but except for their smallness, those found are quite comparable in their form, etc., to the larger examples found in other parts of the country, and on the continent of Europe. As is well known, the flake-implements (Fig. 10) struck from such cores exhibit faceted striking-platforms—owing to part of the worked core being removed with the detached flake, and it has been asserted that a blow given upon the uneven, flaked surface of the core gives rise to a very large bulb of percussion on the flake removed. But the author knows of no satisfactory reason why this should be so, and his experiments in flint flaking have failed to support the contention that a blow delivered upon a flaked and uneven surface of flint produces an abnormally large bulb of percussion on the detached flake. Flakes with faceted striking-platforms, as is consistent with the small number of tortoise-cores found, were comparatively rare in the lower floor, and the assemblage affords a marked contrast to a series of flakes found in a floor of early Le Moustier age (associated with a cold fauna, reindeer, etc.) occurring under 12 feet of gravel in the bottom of the main valley of the River Gipping. This site, which is situated about one mile from Messrs. Bolton & Co.'s brickfield, and which the author hopes to describe on some future occasion, was very rich in flakes with faceted striking-platforms. The



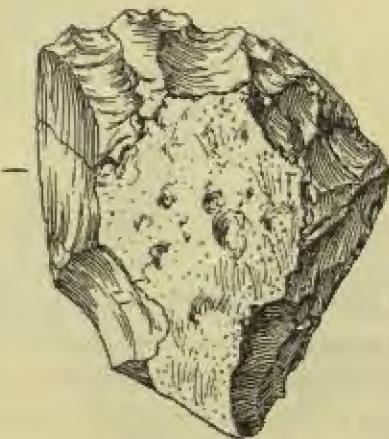
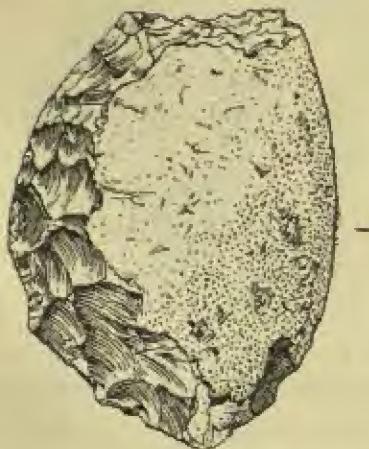
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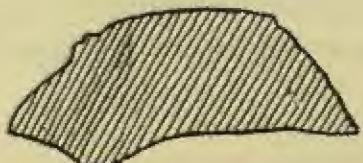
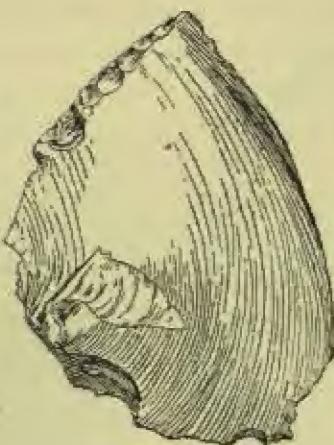
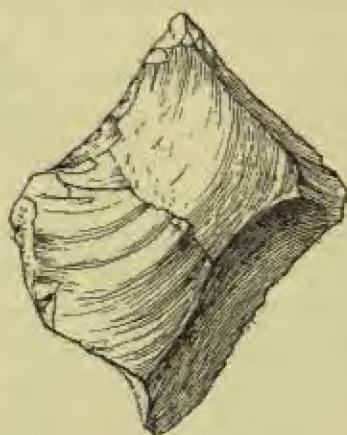


FIG. 11-15.—FIVE FAUCLOIRS, LOWER FLOOR (SLIGHTLY REDUCED).

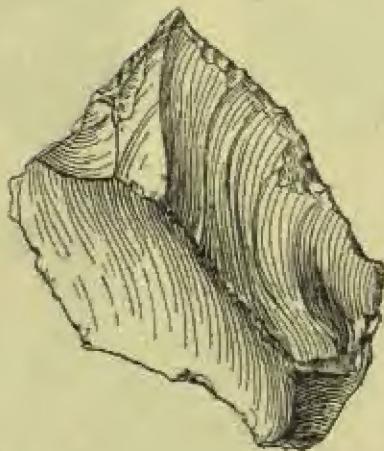
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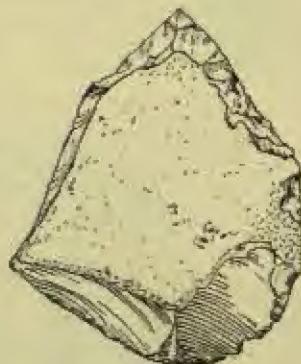
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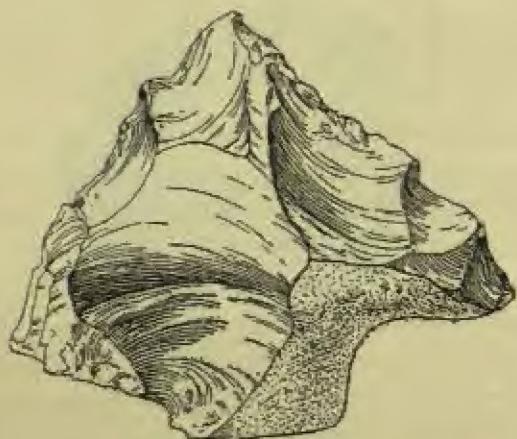
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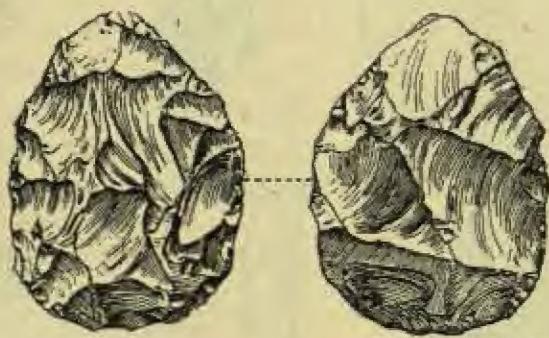
(Natural size.)

FIGS. 16-21.—POINTES, LOWER FLOOR.

racloirs from the lower floor (Figs. 11-15) very often exhibit cortex upon their upper surfaces, and have been flaked to a cutting edge on one side by blows delivered on the flatter under-surface. Most of these implements show minute secondary flaking along the cutting edge which was in all probability produced by use.

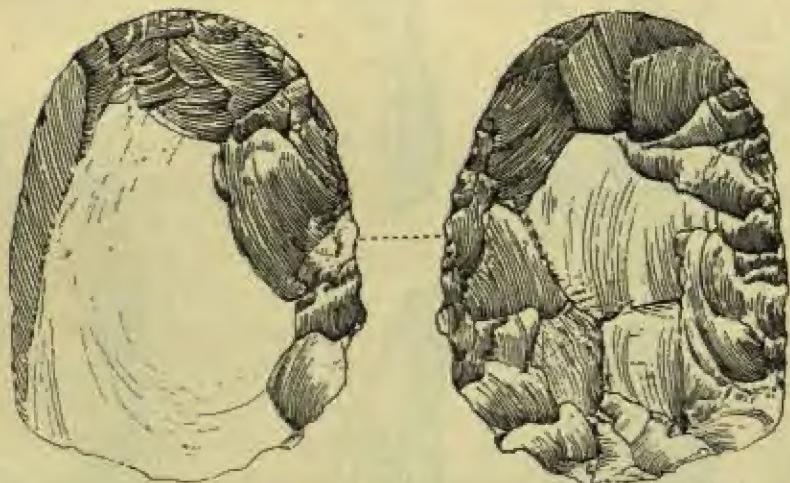
The *pointes* (Figs. 16-21) also occasionally exhibit cortex upon their upper surfaces, but many of them are either made from ordinary flakes or from flakes struck from a prepared core. The edge flaking which has produced the acute point of the implements, is generally very fine.

The small hand-axes (*coups de poing*) (Figs. 22 and 22A) are beautifully fashioned



(Natural size.)

FIG. 22.—COUP DE POING, LOWER FLOOR.

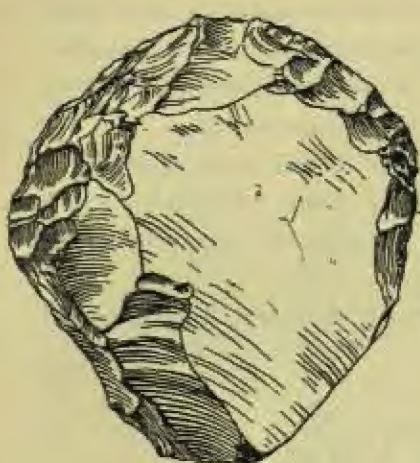


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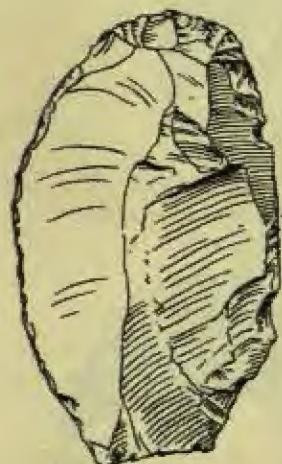
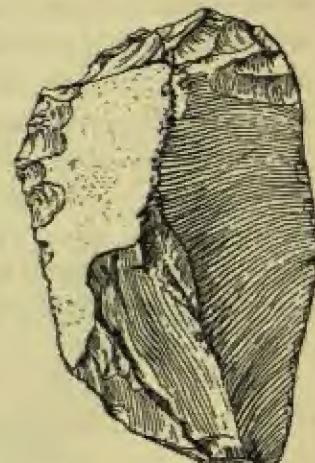
FIG. 22A.—COUP DE POING, LOWER FLOOR.

and reproduce in miniature the characteristics of the earlier examples of this type of implement. One large hand-axe was discovered made from a foreign rock (it was identified by Dr. Marr as sphaerulitic felsite), no doubt derived from the glacial gravels of the district.

The scrapers (Figs. 23-27) seldom exhibit any cortex on their upper surfaces,



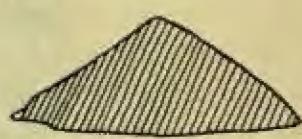
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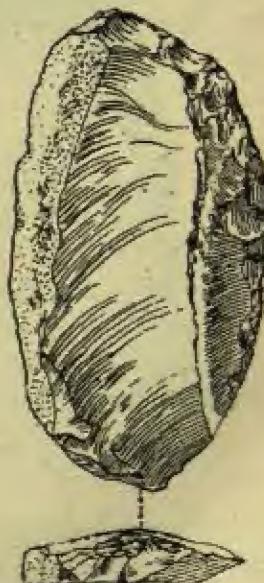
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27

(Natural size.)

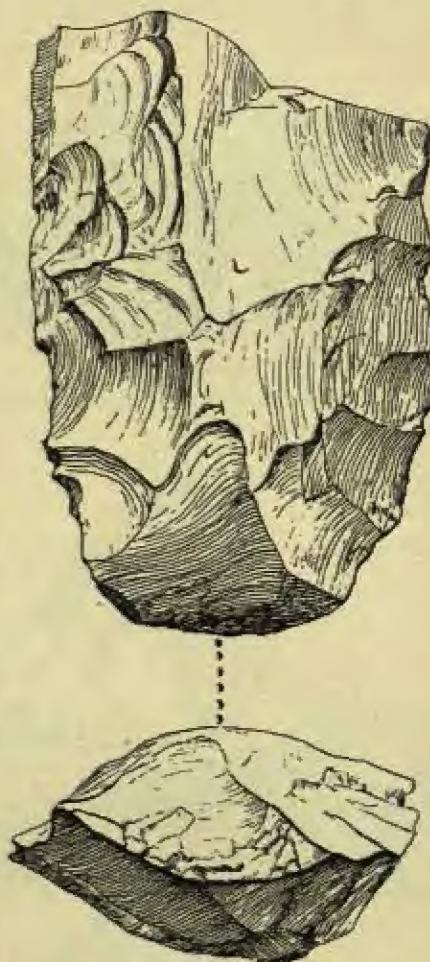
FIGS. 23-27.—SCRAPERS, LOWER FLOOR.

and are all made from ordinary flakes or flakes struck from a prepared core. The flakes forming the cutting-edge have been removed at rather a low angle—and are generally supplemented by minute secondary flaking. Many of these scrapers tend to assume an elongated form, and one or two specimens seem to have been used both as an end-scraper and a racloir (Fig. 27).

The flaking of the implements from the lower floor is of the kind associated with workmanship of the Upper Le Moustier industry. There is the usual large number of "resolved" flakes (due possibly to re-sharpening) and a tendency for the angle at which the flakes have been removed to be higher than that of the flaking of the earlier phases of the Mousterian culture.

*Industry of the upper level.*<sup>1</sup>—The flaking of the implements recovered in the upper floor is of quite a different order from that just described. In this case long narrow flakes were removed, giving rise to the well-known "channelled" appearance of the Aurignac implements. It is somewhat difficult to ascertain how such flakes were removed, but the author thinks it probable that the method adopted was to hold the flint in the hand with the edge to be flaked pressed firmly against the palm. He has found that such a method is conducive to the removal of long, narrow flakes, if care is taken to strike the edge of the flint with sure, firm blows. But he is unable to explain why the pressure of the palm of the hand should cause the line of fracture to proceed for a greater distance in the flint than if it was flaked in the ordinary manner.

The majority of the flakes found in the upper floor were long and narrow, and in very marked contrast to those recovered from the lower floor, and there can be no doubt that the two methods of flaking were entirely different.<sup>2</sup> A large number of cones of flint (Figs. 29-31) (the "core-scarpers" mentioned by Prof. Commont)

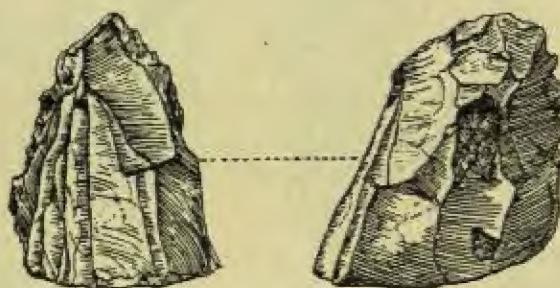


(Natural size.)  
FIG. 28.—DEBASSED HAND-AXE WITH END  
VIEW, LOWER FLOOR.

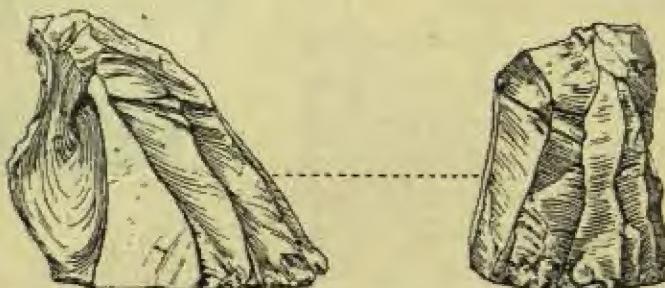
<sup>1</sup> Moir, J. Reid, *Ipswich Field Club Journal*, 1913. Smith, R.A., *Journ. Roy. Anthropol. Institute*, xliv, 1914, pp. 376-379.

<sup>2</sup> Only one portion of a hammer-stone was found. This was of flint.

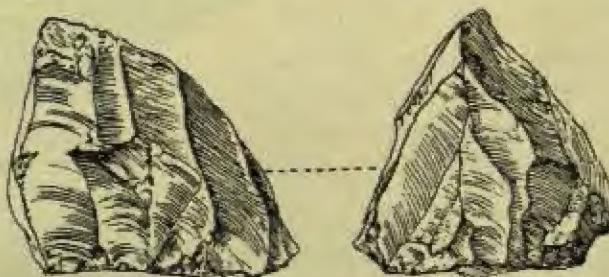
were found, and it seems that these represent the nuclei of the period. But as nearly all of them exhibit minute secondary work round their lower edges, it seems very probable that these specimens were also utilized for planing or scraping purposes. They



29



30



31

(Natural size.)

FIGS. 29-31.—CORE-SCRAPERS, UPPER FLOOR.

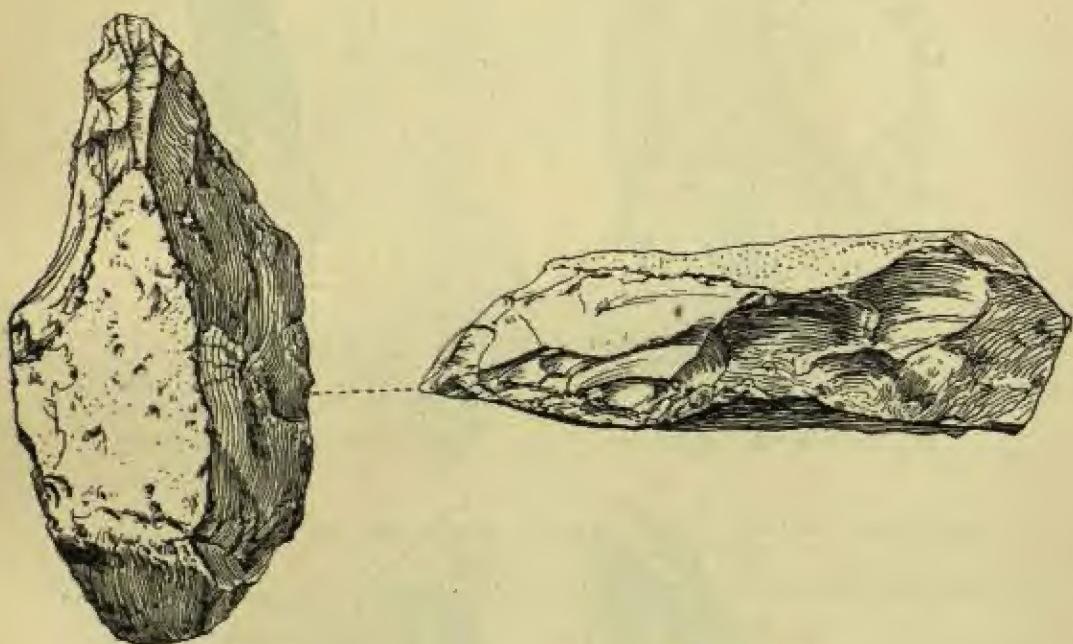
have generally been made from small nodules of flint, and very often the original cortex is retained at the posterior region. It is desired to draw especial attention to one specimen of this series which represents an elongated form of the Tarté plane or core-scraper (Fig. 32).

*Nosed-scrapers (Grattoir à Museau).*—These were not numerous, but one specimen deserves description (Fig. 33). It is made from a piece of flint of which the major fractures are almost certainly thermal. A patch of cortex is retained upon its upper surface. One end of the specimen has been modified by regular channel flaking into a



(Natural size.)

FIG. 32.—ELONGATED TARTÉ PLANE, UPPER FLOOR (TWO VIEWS).



(Natural size.)

FIG. 33.—GRATTOIR À MUSEAU, UPPER FLOOR (TWO VIEWS).

nose or "muzzle," and on each side of this muzzle the flint has been flaked so as to afford an easy and sure grasp when in use.

*Scrapers* (Figs. 34 and 35).—These are made from thick blades of flint, and the scraping edge has been formed by the removal of flakes at a high angle. The result is that the flaking is very steep, and often exhibits undercutting (in reality "resolved" flakes) due to re-sharpening the implement. One scraper made on a narrow ridge-

backed blade is very beautiful (Fig. 35) and has a well-marked faceted striking platform. But this is the only example found in the upper level of such a platform, and it is concluded that this particular method of flaking was dying out at the period represented by the upper floor.

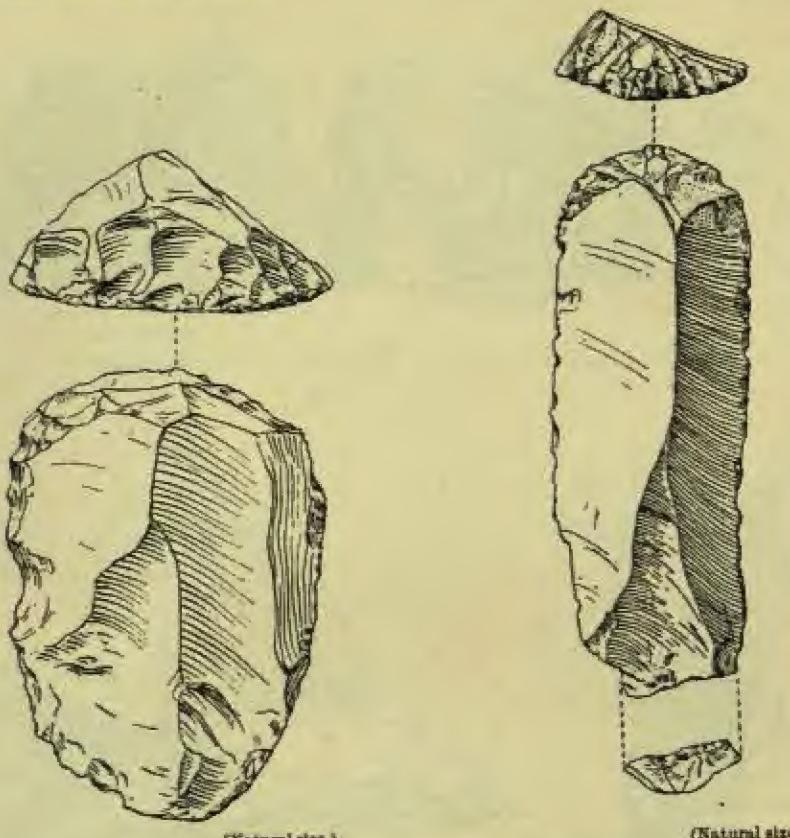
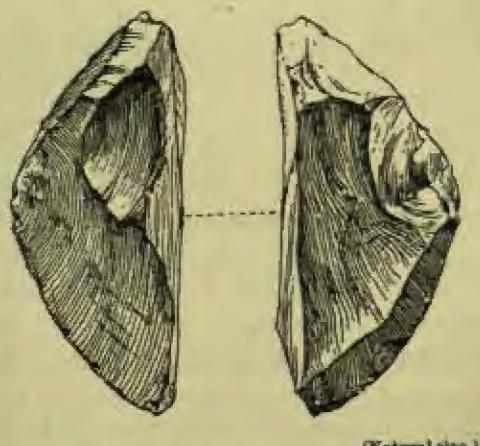


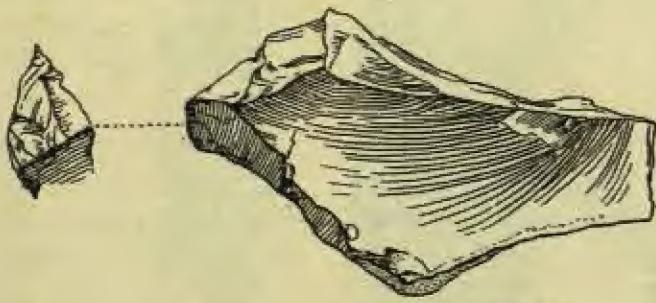
FIG. 34.—SCRAPER, UPPER FLOOR.

(Natural size.)  
FIG. 35.—SCRAPER, UPPER FLOOR.



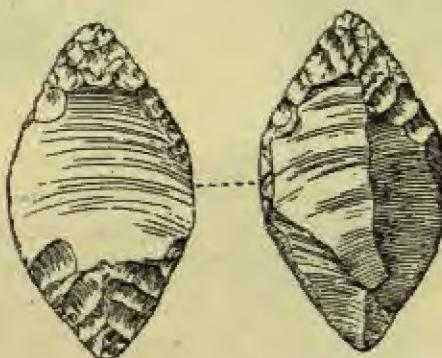
(Natural size.)  
FIG. 36.—GRAVER, UPPER FLOOR.

*Gravers*<sup>1</sup> (Figs. 36 and 37).—These are made from blades of flint so struck that one end is much thicker than the other. This thickened portion was then modified in such a way as to present a chisel-end, well supported by the thickness of the flint behind it; one example of the well-known burin busqué (Fig. 37) was discovered. This is made from a thick blade of flint, and one end flaked in a similar manner to the "grattoir à museau" described above. When the cutting edge required renewing, a blow was struck upon the lower front edge of the worked nose, removing a flake



(Natural size.)

FIG. 37.—GRAVER (BURIN BUSQUÉ), UPPER FLOOR.



(Natural size.)

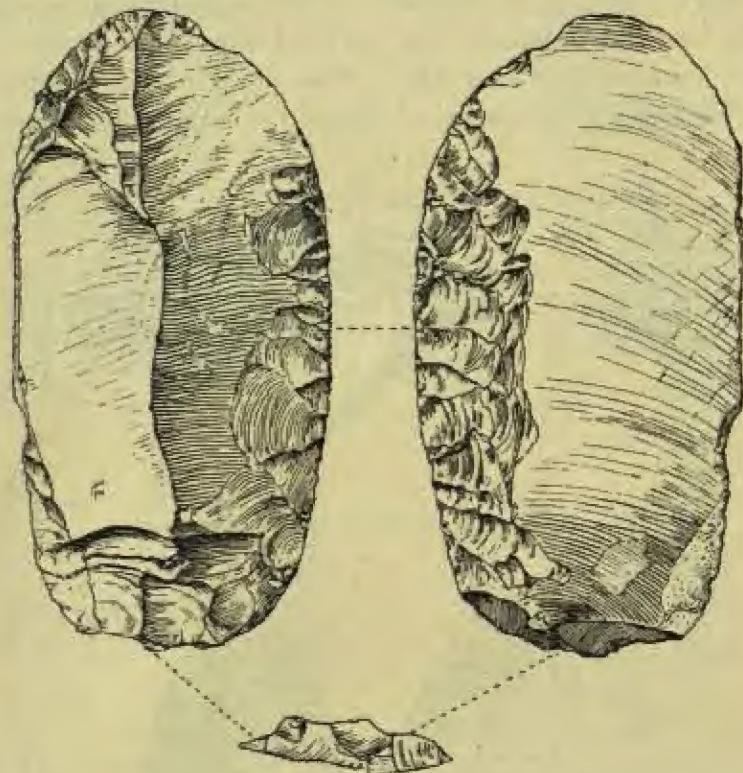
FIG. 38.—EARLY SOUTRÉ IMPLEMENT FROM HILL-WASH OVERLYING UPPER FLOOR.

from the sub-nasal plane, and the implement under description from the upper floor exhibits the remains of three flake scars due to re-sharpening.

*The two early-Solutré Implements from the hill-wash overlying the upper floor* (Figs. 38 and 39).—These are both made from blades of flint, but the beautiful ripple flaking which each exhibits is of an entirely different order from that to be seen upon the specimens from the floors previously described. It is possible that this ripple-

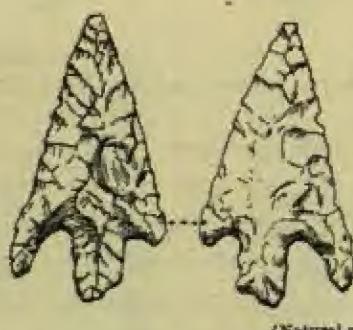
<sup>1</sup> There seems little doubt that these *burins* were used for work on bone or ivory. If such works of art were made at the period of the upper floor, no trace of them was found. But no bones were discovered at this level and it is concluded that the surrounding conditions were not favourable for the preservation of such relics.

flaking was produced by pressure with a bone point upon the edge of the flint, but this is at present a matter for speculation. The larger of the two implements from the hill-wash exhibits a facetted striking-platform. It is hoped at some future time to



(Natural size.)

FIG. 39.—EARLY SOLUTRÉ IMPLEMENT FROM HILL-WASH OVERLYING UPPER FLOOR.



(Natural size.)

FIG. 40.—NEOLITHIC ARROW-HEAD FROM SURFACE SOIL ABOVE HILL-WASH.

make a close examination of the deposit from which these two remarkable specimens have been derived.

*The barbed and tanged arrow-head from the surface soil above the hill-wash (Fig. 40).*

—This is quite a good example of the well-known neolithic form of arrowhead. The specimen is finely made, and the style of flaking again differs from any of the specimens hitherto described. It is patinated a dull slate-grey colour. The specimens selected for illustration and description are a very small proportion of the mass of material collected during the excavations. As is usual, and inevitable, in all implementiferous deposits, the rough pieces and flakes largely outnumber the finished specimens, and it was calculated that about 150 flakes and rough-outs were found to every complete implement. No trace of any grinding or polishing was found upon any of the flints.

*The Pottery.*—As has before been stated, fragments of pottery were found impacted in the lower floor, under circumstances which absolutely precluded any idea of introduction at a later date. The author was naturally very surprised to find pottery fragments in such a position,<sup>1</sup> and imagined at first that the small pieces of black-looking material noticed in the floor were the remains of some hearth. When, however, a large rim of a vessel was found in the lower floor under the usual compact sandy clay, all his doubts were removed, and care was taken to have the specimen photographed *in situ*, in the presence of various friends interested in geology and archaeology (Pl. XVI, Fig. 1). The pottery was in

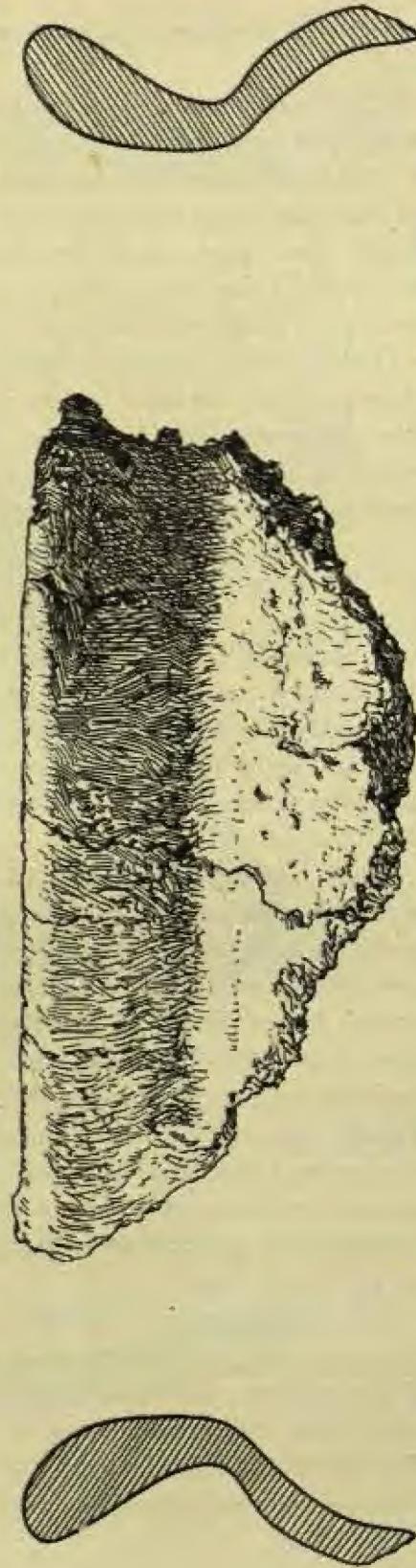


FIG. 41.—LIP AND SHOULDER OF LARGE URN, LOWER FLOOR. (SEE ALSO PL. XVI, FIG. 1.)  
(Reduced to three-fifths natural size.)

<sup>1</sup> As the lower floor in places rested upon clay, the raw material for pottery making was close to hand.

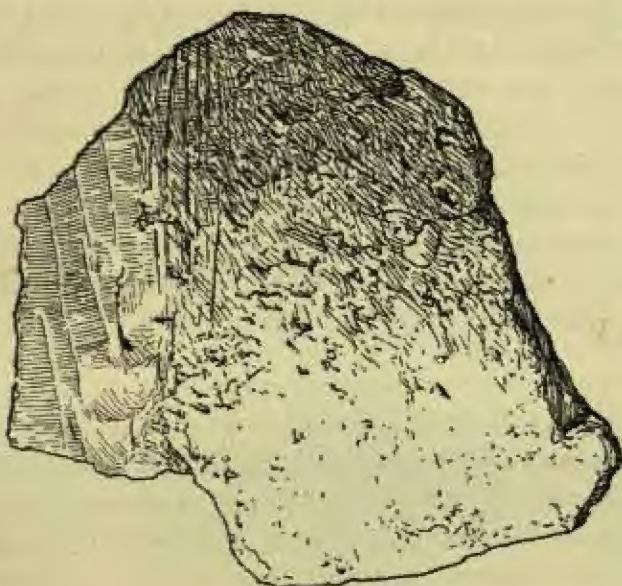
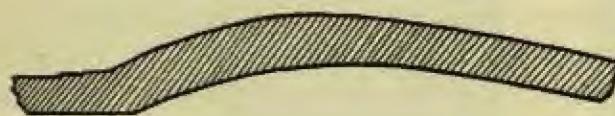
a very friable condition and the greatest care had to be exercised in its removal.

The best specimens were forwarded to Mr. Reginald Smith, who has given the following report upon them.

"1. Part of the lip and shoulder of a large urn (Fig. 41), the outside diameter of the mouth being about  $13\frac{1}{2}$  inches. Fairly hard ware with black core, the surface brownish outside and grey inside. It contains a good deal of coarse grit which makes the outer surface irregular, but a coating has apparently been removed, and the true surface only remains in the angle between the everted lip and shoulder. Another fragment is preserved in its original clayey-matrix. A vessel of this size would require expert firing, as the dimensions must have been comparable with the enormous cinerary urn of the late Bronze Age and the solid corn-bins of Roman date found at Silchester and elsewhere. The oviform urn found in the burial-cave called Trou-du-Frontal at Furfooz, Belgium, required still greater skill; and if of Aurignac date, as some authorities maintain, shows that the potter's art had even then reached a very high level. The present specimen would on that hypothesis be less surprising in a stratum proved by the flint industry to be of Aurignac date; but at present there is nothing to compare it with, and it must suffice to put the find on record. In form it is quite unlike a Bronze Age cinerary urn, so a burial of that date is not a possible solution; and neolithic man (at least in this country) did not use cinerary urns. A photograph was taken of this discovery to show the pottery fragment in position (Pl. XVI, Fig. 1).

2. A fragment 1.7 inches by 1.9 inches with maximum thickness of seven-sixteenths of an inch of pale buff almost pinkish ware, with slightly darker core and fairly large white grit, apparently quartz. This agrees very closely with a series of fragments from the galleries and lower levels of the pits excavated at Grime's Graves, Norfolk, in 1914 (Report, pp. 209, 214); and with a rather thicker piece in the British Museum found 18 feet deep in one of the Cissbury pits excavated by Colonel Lane-Fox (Pitt-Rivers), see *Journal of the Anthropological Institute*, Vol. v (1876), 381. The occurrence of this peculiar ware on these three sites proves nothing in itself, but is an interesting coincidence; and as the pottery of various ages can be to a large extent distinguished, these are probably contemporary, and the date could be determined by the associated relics on one or all of the sites.

3. Small fragments of light grey gritty ware, with yellowish outside surface, not unlike the piece that most closely resembles the typical ware of Cissbury and Grime's Graves; but the size and profile of the vessels are indeterminate. One piece shows a thickened and rounded lip slightly everted and another (Pl. XVI, Fig. 2) has slight vertical lines on the neck above an angular shoulder. There is a similar piece of about the same size, with the vertical markings very



(Reduced to three-fifths natural size.)  
FIG. 42.—FRAGMENT OF POTTERY WITH STEP MARKINGS ON NECK (SKELETON SITE).



faint, but starting from the ridge in the same way. The above fragments were found with red ochre (ruddle), a combination repeated in the second level of the third Goyet Cave near Namur, shown by the flints to date from later Aurignac times (specimens in British Museum).

4. Three fragments larger than usual (the largest 3 inches by 2 inches) with tool marks on the inner blackened surface; and outside a reddish yellow facing, fairly smooth and soft, but with some grit visible. They evidently belonged to a large vessel or vessels, as they are nearly flat and evidently not bases. Not unlike the typical Grime's Graves and Cissbury ware, but not datable on internal evidence.

5. Fragment of a large vessel dug out of sand in the skeleton pit, Bolton & Co.'s brickyard, about 4½ feet from the surface under rubbly drift. It consists of the lower part of the neck, and upper part of the body of a large urn, about 11½ inches in diameter at the bulge. On the neck are step-like markings (Fig. 42) and finger prints, and the plain body has an uneven surface ranging from yellowish-brown to black. The inner surface is yellowish-brown and shows tool marks, the core being black and rather gritty. One largish stone is visible on the outer surface, and the average thickness is one-third inch (nearly 1 cm.). The urn must have approached the globular form, rather constricted at the neck, but no part of the lip remains. The markings of the neck are well seen also in the sandy matrix which is preserved as evidence of stratification."

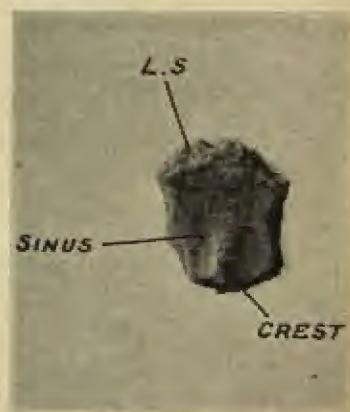
The occurrence of pottery with ancient animal forms and flint implements of Upper Le Moustier date is somewhat startling, but this is not the first occasion on which such an association has been notified. In July, 1914, the author wrote to Dr. A. Rutot, of Brussels, in reference to this matter, asking if finds of a similar nature had been made in Belgium. His reply was to the effect that "twelve caverns in Belgium have yielded fragments of pottery"—

1. Upper Le Moustier horizon, Hastière.
2. Mid-Aurignac horizon, third Goyet cavern.
3. Upper-Aurignac horizon, Trou Magrite (Pont-à-Lesse), and third Goyet cavern.
4. Lower La Madaleine horizon, third and second Goyet caverns.
5. Mid La Madaleine horizon. Trou des Nutons and Trou du Frontal.<sup>1</sup> Dr. Rutot has himself found in the cave known as Fond-de-Forêt two fragments of pottery in the upper Aurignac level. But the main and most conclusive discovery was made, however, at Le Caillou-qui-Bique, where about 500 fragments were associated with an upper Le Moustier industry. This large find of palaeolithic pottery does not contain quartz or other grit mixed with the paste; but some specimens found

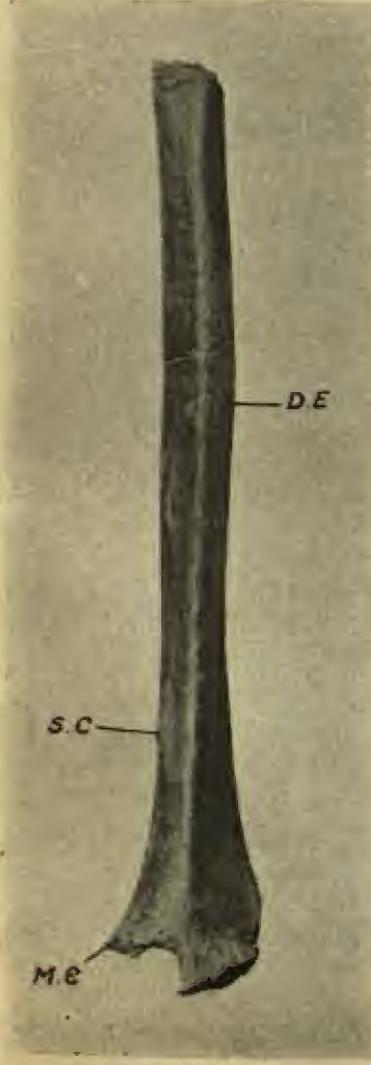
<sup>1</sup> *Bull. Soc. préhist. de France*, 1907-8. (Two papers.)



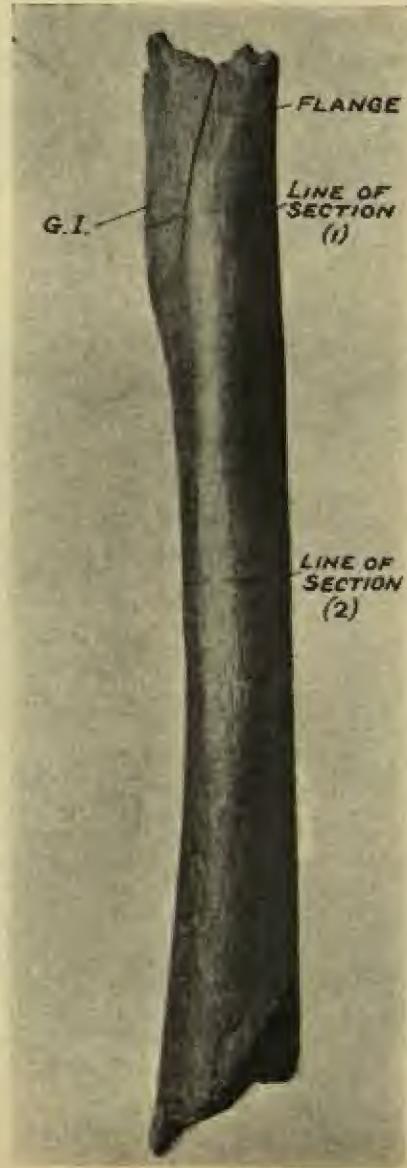
FIG. 1.—PHOTOGRAPH OF SECTION ON SOUTH SIDE OF VALLEY, SHOWING THE TWO FLOORS SUPERPOSED.  
(The position of the floors is indicated by arrows.)



(half natural size.)  
FIG. 2.—L.S. = lambdoidal suture.



(Half natural size.)  
FIG. 3.—D.E. = Deltoid impression;



(Half natural size.)  
FIG. 4.—G.I. = gluteal impression.



(Half natural size.)  
FIG. 5.—G.I. = gluteal impression.



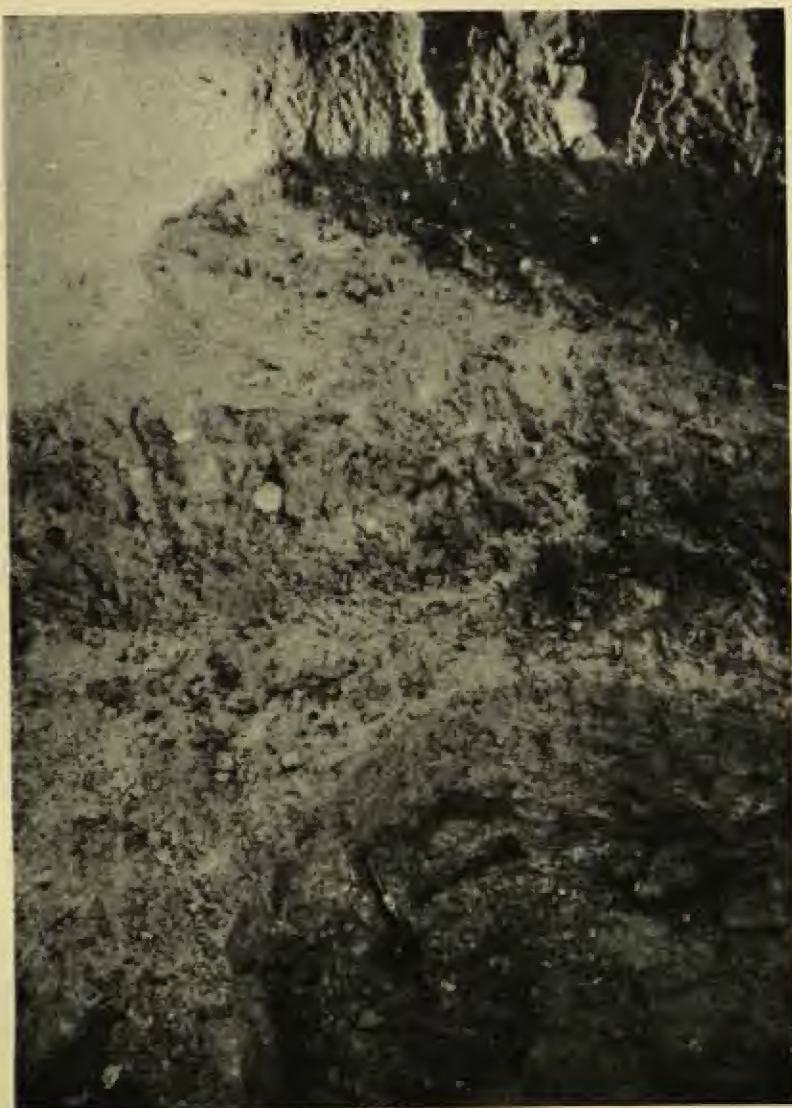
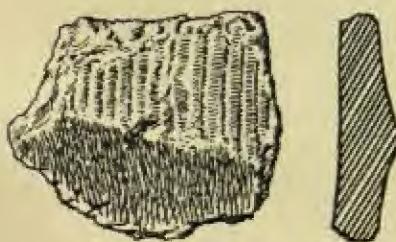


FIG. 1.—POTTERY FRAGMENT (TO RIGHT OF TOBACCO PIPE—*IN SITU* IN LOWER FLOOR).



(Natural size.)

FIG. 2.—FRAGMENT OF POTTERY WITH ANGULAR SHOULDER AND VERTICAL LINES, LOWER FLOOR.



(Natural size.)

FIG. 3.—MEDALLION OF COPROLITE SHOWING INCISED LINES ON ITS SURFACE.

SOME HUMAN AND ANIMAL BONES, ETC.



by M. Dupont contain grit, often of calcareous stone. And there are other cases of the discovery of pottery fragments in Pleistocene deposits.<sup>1</sup> The only remaining discovery to be recorded is that of a small " medallion " of coprolite (evidently derived from the base of the Red Crag) which has been rubbed down to a certain thinness, and a series of lines, without any apparent purpose, incised upon one of its surfaces (Pl. XVI, Fig. 3). This specimen was found in the lower floor, and in intimate association with the leg bones of a horse, which appeared to be in their natural position to each other, but the author is unable to assign any reason for this association, which may be quite fortuitous. But the medallion itself is of interest as showing that in upper Le Moustier times the practice of engraving upon certain materials has begun to show itself. This completes the account of the excavations carried out in the small tributary valley in which Messrs. Bolton & Co.'s brickfield is situated, and from the richness of the site in prehistoric relics it may be concluded that other and similar tributary valleys in different parts of the country will yield an abundant harvest of relics to the prehistorian. It is the author's opinion that the investigation of such floors as have been described above will tell us much more about the life and attainments of the later palæolithic races than the river gravels, etc., which contain only the scattered and more resisting objects which have been swept down in time of flood when such floors were broken up.

#### *Summary.*

The excavations which have been carried out in the small tributary valley near Ipswich have demonstrated that two well-marked occupation levels occur in the deposits covering the sides of the valley. Since these ancient floors were occupied by man, the valley has suffered no little denudation and erosion, and the floors now cut the surface of the ground some distance above the valley-bottom. The lower floor at one place where it rested upon chalky boulder clay was very rich in mammalian bones, comprising both ancient and recent animal forms ; and among these remains occurred three human bones. These bones were scattered upon the floor in the same haphazard manner as the animal remains ; and as the shaft of the human humerus and femur exhibit marks of scraping and gnawing precisely similar to those upon the animal bones, the conclusion is drawn that the ancient people inhabiting the lower floor indulged occasionally in human flesh as food. An examination of these human bones has shown that at least two, and possibly three, individuals are represented, and while the cranial fragment and the humerus are almost certainly of the " modern " type, there may be some doubt as to the modern conformation of the femur. Professor Keith is of opinion that this latter bone is of the modern type, while Dr. Duckworth holds that it cannot be styled Mousterian

<sup>1</sup> Lyell, *Antiquity of Man*, pp. 78, 116, 118, 119, 128, 129. Annual Report Smithsonian Institution, 1913, p. 522. Keith, *Ancient Types of Man*, p. 111.

"in the whole of its osteological characters." The flint implements found in the lower floor are shown to be of the Upper Le Moustier type, while those from the upper floor are Aurignacian. Two specimens found in the hill-wash overlying the upper floor, and deposited apparently during a period of low temperature, are clearly of early Solutré age, while in the surface humus a barbed and tanged arrow-head of the neolithic period has been found. The succession of the deposits in the valley and the contained implements thus follows an orderly sequence, such as has been established by cave exploration in France and Belgium.

Fragments of pottery were found in the lower floor, and it is thus clear that in Upper Le Moustier times in England the potter's art was known. This, moreover, is borne out by the discoveries of Dr. A. Rutot in Belgium.

A small medallion of coprolite derived from the base of the Red Crag was found in the lower floor, and bears incised lines upon its surface. No trace of the practice of polishing or grinding of flint was found in any of the excavations carried out.

NOTE.—The human bones and all the figured specimens of flint implements, including the medallion of coprolite, are on exhibition in the Museum at Ipswich. Another series of the flint implements, and the fragments of pottery figured, can be seen and examined at the British Museum, Bloomsbury.

## ARAB AND SWAHILI DANCES AND CEREMONIES.

By R. SKENE.

## THE RAZHA DANCE.

THE Razha was originally a war dance practised by the Arabs in Arabia prior to starting out on a raid. It originated at Manga in Muscat, and is danced with naked swords, the object being to get the muscles of the sword arm into training. The Hatharmut or Hadramaut Arabs also dance it, but use daggers instead of swords.

The dancers, who of course are all men, stand in two rows facing each other, or in one row. They advance slowly a few inches at each step, keeping time to the drumming. The sword is held perpendicularly in the right hand, the fore-arm being at a right angle with the body. While holding the hilt of the sword in a perfect balance between the thumb and the first and second fingers, the base of the hilt is given a smart blow with the wrist so as to make the blade of the sword quiver. Being highly polished and made of fine supple steel, the quivering blade reflects the light in a most effective manner. This can only be done with the long straight double-edged sword of Southern Arabia and not with the scimitar-like blade used further north, owing to the thickness of the latter weapon.

The music for the Razha dance is supplied by a drum called a *chapuo*, cylindrical in shape, covered with goat skin on both ends. It is about eighteen inches long by eight in diameter, and is played on both ends with the hands, while hung across the waist of the drummer by a cord round the neck. A bass drum is also used, called a *rumi* of the same shape as the *chapuo*, but larger, being two to three feet long and fifteen inches in diameter. It is beaten in the same manner as the *chapuo*.

Anyone who knows how to dance can join in. No refreshments are served.

## THE SHERWANI DANCE.

This is danced by the Arabs of Mkelle or Makulla, without any weapons, and by men only, who attend by invitation. It usually takes place at a wedding festival, in which case food and coffee are served round, or at any other general rejoicing. The dancers stand in two lines facing each other about eight or ten paces apart. They bend the knee and bow the body slightly forward to each other in unison and in time to the beating of the drums. They also sing a chorus song and keep time by clapping their hands together.

The orchestra consists of a *vumi* and a *chapuo* drum, both described above (see Razha dance). A treble drum called a *mawasi* is also used. It is much smaller than the *vumi* and is only about eight inches long by eight inches in diameter. It is covered with goat skin on both ends and is beaten with the flat of the right hand while held in the left by a piece of cord. The drumming is accompanied by cymbals of brass called *vitasa*, which are placed on the ground one above another and struck with pieces of stick, one in each hand, so as to make the cymbals rattle together. In lieu of the cymbals, a metal rod is sometimes used bent into a triangle exactly the same shape as the triangles used in European military bands, and played in the same manner.

The Shebwani is sometimes danced in the afternoon but more often at night. It has no mystical meaning.

#### THE SHERHA DANCE.

This is danced by the Hatharmut Arabs to celebrate a wedding or for any other cause of rejoicing. The dancers, who are all men, and who attend by invitation, stand round in a large circle some ten paces in diameter and sway the body slightly from side to side, while clapping their hands in time to the music. Presently two men come out of the ring and dance towards each other, and then backwards and forwards in a sort of "chassé croisé" for about ten minutes, and then they retire from the ring and are replaced by two others. Sometimes two couples dance in the ring at the same time.

The music is supplied by a wind instrument much resembling a clarionet or a French "musette," but the mouthpiece consists of two reeds instead of one, and the tone is very similar to that of the chanter of Scotch bag-pipes. This instrument is called a *zumari*, and supplies the tune accompanied by a *vumi* drum described above (see Razha dance) and by a *msondo* drum standing about four feet high with a diameter of about eighteen inches. It is cylindrical in shape and is covered by a goat-skin at the top end only, the bottom end being open. It is played with both hands in an upright position, resting on the ground.

No refreshments are served at a Sherha dance except if it is held to celebrate a wedding, in which case *pilaw* is served and coffee also.

#### KINANDA DANCE.

This dance partakes of the nature of a performance for the amusement of the onlookers and is held indoors. Two male performers hold a silk scarf or woollen shawl between them and repeatedly advance towards the audience and retire, while executing various steps and figures. They then face each other and dance in that position, executing with their arms and bodies slow and graceful movements. Then they face the audience and advance and retire and so on till they become tired.

The musical instruments consist of the small *marwasi* drum described above (see Shebwani dance) and of a *kinanda* which supplies the tune. The latter is a string instrument of the nature of a guitar and is played in much the same way. It usually has seven strings, six of which used formerly to be made of sheep gut, but are now made of twisted silk. The seventh is the bass string and is made of copper wire.

Although not considered altogether reprehensible by austere Mohammedans, the "Kinanda" entertainment is looked upon as rather advanced, if not fast.

Sometimes the dancing is dispensed with and the entertainment is reduced to solo songs accompanied by the *kinanda*. It then assumes a more respectable character, though still not entirely approved of.

Being held indoors, the audience naturally come by invitation only. Refreshments consisting of coffee, sherbet and *halwa* (Turkish Delight) are handed round.

#### THE ZAMIL DANCE.

This is danced by the Hatharmut Arabs, and generally takes place either by day or by night, in front of the house of some exalted person to whom it is intended to pay compliment or to show respect. It is in fact a sort of serenade, but is also danced at weddings.

The dancers form up in one or more lines facing the house of the person in whose honour it is being held. The leader of the dance starts singing a solo, usually a song of praise to the person in question, and the remainder take up the chorus, which they accompany by rhythmic clapping of hands and swaying of the body. It is not by invitation, and anyone may join in. No drums or musical instruments are used and no refreshments partaken of, except at weddings. This dance has no mystical meaning.

#### THE CHAMA DANCE.

This may be called a faction dance owing to the element of competition which enters into it in regard to some other faction which has also organized a dance. It is danced by Swahili men, who dress up in their best clothes and wear Arab daggers and swords borrowed from those of their friends who have them. They do their best to make as fine and as big a show as possible in order to eclipse the dance of the other competing faction. Formerly the dance was accompanied by a feast, and still is in the Lamu District, where the factions vie with each other as to the number of cattle they can afford to kill. In 1912, one faction at the village of Mkunumbi (Witu Sultanate) was known to kill thirty head of cattle to cap the twenty-five head which another faction had killed a few days previously. Needless to say that such waste is impossible in the Malindi District where cattle are scarce, and where the dancers only compete in matters of personal adornment and the number of followers. Faction feeling sometimes runs high, and if two competing dances happen to be taking place on the same night it is not unheard of for one party to attack the other with sticks.

The dance itself resembles the Arab Razha dance, the men standing in a row and jerking sticks in the same manner that the Arabs jerk their swords, one of which may sometimes be seen in the hand of a Swahili dancer of the Chama.

The orchestra consists of a *vumi* drum, a *chapuo* drum, a pair of cymbals or *vitasa*, a *zumari* or clarionet, all of which are described above (see Razha dance, Shebwani dance and Sherha dance), also a tambourine called a *tari* or *pari*. This is sometimes ornamented with loose brass discs that jingle together, as in the Spanish tambourine. The goat-skin is pegged to the wooden frame and is tightened by stuffing a more or less thick cord between the skin and the frame.

The Chama is usually danced in a public place and no invitation is necessary. Anyone may join in who feels so inclined. No refreshments are served nowadays in the Malindi District at a Chama dance, which has no mystical significance.

#### THE SHANGWI DANCE.

The dance is identical with the Chama and is danced by the winning faction in the Chama competition, which is judged by the “*wazee wa Ngoma*,” or elders of the dance, men who are accustomed to take the lead in dances, in other words “masters of the ceremonies.” The winning faction proceed to the house of the organizer of the opposition dance and dance the Shangwi in front of it. He is supposed to take this as a compliment, and passes round a scent bottle and sometimes takes part in the dancing himself. The Shangwi has no mystical significance and is usually danced at night with the same orchestra as for the Chama.

#### NGOMA YA FIMBO. (Walking-stick dance.)

The Ngoma Ya Fimbo is danced at Swahili wedding feasts, and at Swahili circumcision feasts. The dancers, all men, assemble by invitation and form a ring in the open near the house of the host, all carrying sticks, hence the name of the dance. While those in the ring balance themselves slowly and rhythmically from one foot to the other, two of their number go into the centre and make passes at each other with their sticks as if they were swords, in time to the drumming. After a few minutes of this, another pair go into the centre of the circle and perform in the same manner while the first two retire, and so on to the end of the dance, which usually takes place by day.

Cigarettes and betel nuts are passed round to the dancers. The music is supplied by *vumi* and *chapuo* drums described above (see Razha dance) by *vitasa* or cymbals (see Shebwani dance), and by a *zumari* or clarionet (see Sherha dance). In a temporary pavilion of palm-thatch erected close by, a number of young slave women generally stand holding buffalo horns in their left hands, which they strike with small sticks in time to the drumming.

This dance has no mystic significance and is merely a form of rejoicing.

### THE MWARIBE DANCE.

A dance for women only, which takes place indoors if danced by free women, and out of doors if the dancers are slaves. The women stand in a circle singing songs and clapping their hands in time to a triangle described above (see Shebwani dance). One dancer then advances, executing various fancy steps, towards another dancer in front of whom she stamps her foot and then retires, still executing fancy steps, to her place in the ring. The person in front of whom the first dancer stamped her foot then advances from her place in the ring in the same manner as the first dancer and stamps her foot in front of a third, who comes out in her turn, and so on.

The songs are led by one of the women, who sings the solo while the remainder join in the chorus. No drums are used.

This dance often takes place at wedding festivals when betel nut and cigarettes are handed round with tea. Then towards the end of the entertainment meat and rice are eaten. It may also be danced on the occasion of other rejoicings, the special time of year for having it being the first week of the North-east monsoon, that is, in November and December.

This Mwaribe dance has no mystic meaning.

### THE MWASHA DANCE.

This is also a woman's dance and is of Bajuni origin, its introduction to the Malindi District from Witu having begun about four years ago. If the dancers are free women they dance indoors; if they are slaves the dance takes place in the open, but always by invitation.

The guests line up in two or three rows, one behind the other, and move forward slowly an inch or two at each step, while they jerk their chins forward and move their shoulders in time to the drums. When the front row gets up to the wall of the room, or to the limits of the dancing-floor, all the dancers face about and move slowly as before in the opposite direction, the front row becoming the back one.

If it takes place indoors, no men are allowed to be present except the orchestra, consisting of the performers on a *rumi* described above (see Razha dance) on a *tari* or tambourine (see Chama dance), and on a *zumari* or clarionet (see Sherha dance).

This dance, which has an undoubted touch of savagery about it, may perhaps be derived from the Somalis, and tends to work the dancers up into a nervous state. It is often danced in competition with another dance faction. No refreshments are served.

It has no mystic significance and appears to be indulged in when the general physical condition of the performers calls for a nervous outlet of some sort.

### THE DANDARO DANCE.

This is rarely if ever danced by free men, and is considered essentially a slaves dance. In a convenient open space, men and women stand in a circle facing inwards, the drums being in the middle. The men stand together, occupying one part of the circle and the women the other. The dancers place the right hand on the left shoulder and the left hand under the right elbow, and in this position they bend the knees slightly and sway the body in time to the music while progressing very slowly sideways round the circle to the right. A *zumari* or clarionet described above (see Sherha dance) plays the tune to which the dancers sing the words of a song, or rather a chorus repeated over and over again at short intervals which are filled by the clarionet solo. The accompanying drums consist of a *tumi* and a *chapuo* (see Razha dance), also a *kurugo* drum, about two feet high and ten inches in diameter, with a goat-skin on one end only which is beaten with a stick, the drum resting on the ground in an upright position.

The Dandaro may be danced during the daytime as well as at night. Occasionally food may be cooked and partaken of towards the end of the dance. In the larger townships no invitation is necessary, and anybody may join in.

### THE KI-NYASA DANCE.

As its name indicates, this dance is an importation from Nyasaland, introduced first to Zanzibar and then to the coast of the mainland by slaves captured in Nyasaland and brought here by the Arabs. Consequently it is a dance practised only by slaves and people of humble origin.

It is danced in the open either by day or by night. Men and women, arranged in no special order as to sex, form a circle standing one behind the other and go round in a direction opposite to the hands of a clock, moving in quick time but taking very short steps and bending the knee considerably at each step. The arms are held in the position of a person running, that is to say with the elbow bent and the forearm at right angles to the body, which is bent slightly forward. Some of the dancers jerk their shoulders up and down occasionally. The leader of the dance sings a solo and the others take up the chorus. The men wear a string of small iron bells known as *njuga* strung round their knees, and stamp their foot at each step so as to make them jingle.

One large drum is used, called a *msondo*, and fashioned somewhat after the drum of the Washambala. It is rather a high-toned drum in spite of its size, which is about six feet in length and twelve to fifteen inches in diameter. One end only is covered with goat-skin, struck with the player's hands. The open end of the drum rests on the ground while the drummer stands astride the other end which is supported by a cloth round his waist, and he plays it in that position. This dance has no mystical meaning, and is merely an expression of a superabundance of animal spirits which

are given vent to by singing and running round in a circle, in time to the beating of a drum, very much in the same manner as children do. No invitations are given, and anyone may join in. No refreshments are handed round.

#### THE MDEMA DANCE.

This also is an importation from Nyasaland (see Ki-Nyasa dance), and is danced by the slave population only, either by day or by night. It is exactly like the Ki-Nyasa dance described above, with the exception that no iron bells are strapped round the knees, and it is, if possible, of a simpler character, the Ki-Nyasa being in truth simple enough. Like the latter it is merely a vent for high animal spirits. No refreshments are given and no invitations are necessary.

#### THE KINDIMBA.

The Kindimba is not a dance, but a musical entertainment into which enters a slight element of the mystical. It is only given by people of the slave class in fulfilment of a vow. Any person who greatly desires something or some event to come to pass makes a vow to give a Kindimba if his wish is fulfilled.

Invitations are issued to his friends by the person who is giving the entertainment, and they assemble at his house. The men and women sit together either indoors if there is room, or else in the open. Songs are sung by a leader, the other guests joining in the chorus, and clapping their hands in time to the singing, which is accompanied by a small drum called a *mqumbaro*, very like a *marwasi* (see Shebwani dance), with this difference that only one end is covered with a goat skin, while in the *marwasi* both ends are covered. The other end, which is open, is made to rest on the chest or stomach of the player, who performs upon it in that position with both hands. Hard grains of maize are placed in dry gourds of various sizes, and these are rattled in time to the singing.

The entertainment partakes of the nature of thanksgiving, and frivolous songs are therefore avoided. Although not exactly of a religious character, a certain amount of superstition is far from being foreign to the Kindimba.

#### THE VUGO.

At a wedding, a procession of women is often formed in the evening after dark to parade the streets, and is called a Vugo. The women sing in chorus to the sound of buffalo horns beaten with short sticks. No men are allowed to take part in the procession, which is both an Arab and a Swahili custom.

#### THE KINYAGO DANCE.

This is a Swahili medicine-dance usually held outside the town in a plantation on a moonless night. No artificial lights are allowed. Swahilis who have any

pretensions to being medicine-men inform their friends that a Kinyago is to be danced at a certain spot on a certain night, and a crowd consequently congregates there. The medicine-men, most of whom in Malindi District apart from Giryama are of Shambala slave origin, make themselves up with the help of clothes stuffed with grass to represent certain wild animals, such as elephants, lions, etc. A ring having been made in the waiting crowd, a medicine-man thus disguised as an animal suddenly dashes from behind a convenient bush and enters the ring, where he capers about and makes a noise in imitation of the beast he represents. On getting tired he retires again behind the convenient bush, and another disguised medicine-man takes his place in the ring and so on. A *msondo* drum is used, described above (see Ki-Nyasa dance). The crowd takes no part in the performance.

The Kinyago is, of course, a heathen dance from Nyasaland imported by slaves. It takes place usually after a good harvest, and is intended more or less as a thanksgiving to the spirits that control the rain and the abundance of food generally. It is also intended by the medicine-men to impress the people with the powers which they ascribe to themselves of being able to change the shape of their bodies into that of any wild animal. But these pretensions are not accorded much credence nowadays in the Malindi District.<sup>1</sup>

#### NGOMA YA PEPO.

The Swahili word *pepo* is the equivalent of the Arab word *jin*, or devil or evil spirit. The people inhabiting the coastal zone, both Arabs and Swahilis, believe in the existence of these beings, some of whom are considered harmless while others, entering into the human body, create various ills and pains, insensibility or sometimes a demented state accompanied by violent gestures. It is quite evident, even to a layman, that these ills are due to a disturbance of the nervous system of imaginative and highly-strung individuals. Thus one finds that the great majority of the people who get *pepo* are women.

The native cure for *pepo* is principally drumming. The natives of Africa are particularly sensitive to rhythm, pure and simple, even more so perhaps than Europeans. The rhythm of certain kinds of drumming has the effect of exciting the nerves to an ecstatic degree, while other rhythms appear to have the contrary effect upon the nervous system of Africans. It is the latter rhythms that are used as a cure for *pepo*.

This physiological effect of rhythmic drumming is, however, unknown to the inhabitants of the coastal zone, and believing as they do, that the nervous disturbance known as *pepo* is caused by the presence of evil spirits in the body, they set about propitiating the *jin* and putting him in a good temper by giving a drumming

<sup>1</sup> This reminds one of some of the corn dances recorded by Sir J. G. Frazer in *The Golden Bough*; and by Professor Ridgway in his *Drama and Dramatic Dances of Non-European Races* (1915), pp. 335-374.

entertainment in his honour, so as to induce him to depart from the body of the person possessed.

The exorcising of the *pepo* is conducted by a professional man or elderly woman known as a *fundi* or *mganga* who specializes in certain kinds of *pepo*.

The *pepo* themselves are divided into various tribes such as the *pepo ya ki-galla*, *pepo ya ki-arabu*, *pepo ya ki-somali*, *pepo ya ki-shakini*, *pepo ya i-pemba*, *pepo ya ki-nubi*, etc., and some even are said to be like animals, such as the *pepo ya ng'ombe* and the *pepo ya punda*. Besides belonging to various tribes, the *pepo* have individual names similar to those common to human beings of the same tribe. Thus some *pepo ya ki-galla* are known as Guyo, Barsa, Godana, Galgalo, all of which are fairly common amongst the Gallas on the Tana River.

The *pepo* is recognised by the language it speaks through the lips of the person possessed. The *fundis* make out that the language spoken is actually Galla, Somali, Arabic, etc., but that it is an ancient form of these languages, and that no one can understand them but the *fundis* themselves. This, of course, is nonsense, as it is impossible for a person ignorant of a language to speak it suddenly and quite fluently. What actually happens is that the person possessed speaks ordinary Swahili,<sup>1</sup> but being in a state of high nervous tension the voice assumes an unnatural pitch, and the words are spoken indistinctly and interlarded with inarticulate sounds, so that they may be said to assume, with a stretch of imagination, either an Arab, a Somali, or any other accent, and, together with the inarticulate sounds uttered, are interpreted by the "fundi" as being ancient Arabic or ancient Somali, or some other ancient language.<sup>2</sup>

Each *fundi* has his own special set of *pepo* whom he knows by name, and to him only will such *pepo* respond. If a *fundi* is called in to attend to a possessed person, and is unable to make the *pepo* speak to him through the lips of the patient, then he knows that the *pepo* in question is not one of his set, but is a client of some other *fundi*. He then withdraws from the case, and suggests to the relations of the patient that such or such *fundi* be called in.

The first step in the treatment of a possessed person is to get the *pepo* to "come into the head" of the patient and speak to the *fundi*, the object of this being to find out from the *pepo* what would be acceptable to him as an offering in order to induce him to depart from the body of the possessed person.

The method of making the *pepo* speak is by administering *dawa*, or native medicine. The various tribes of *pepo* respond each to its particular kind of *dawa*, which in most cases consists of a decoction of roots mixed with leaves of plants found in the bush, and sometimes fresh seaweed. Each *fundi* has, of course, his own secret prescription. The mixture of roots and leaves is placed in a

<sup>1</sup> This is not certain.—C. W. H.

<sup>2</sup> For possession by spirits of other tribes, see Junod, *Les Baronga*, pp. 440, 441.

pot and made to boil. The patient is made to sit close up to the pot, or, if possible, over it, and is then entirely covered with a sheet in such a manner as to allow as little as possible of the vapour from the pot to escape. This is practically a Turkish bath, the effect on the patient being naturally a soothing one, and on leading questions being put to the patient by the *fundi*, the *pepo* will state through the mouth of the sick person who he is and how many days' drumming he would like in order to induce him to depart and leave the patient in peace. This method of applying native medicine is used to make the *pepo* of almost all the heathen tribes respond to the *fundi*, provided, of course, that the *fundi* is the right man for that particular *pepo*, and provided the right decoction of roots and leaves is used.

If the *fundi* called in has a suspicion that the *pepo* he has to deal with belongs to a Moslem tribe, such as Arab, Somali, or Nubi, he does not employ the Turkish bath method in order to induce him to speak, but makes a mixture of camphor, musk, and saffron, with a little water, and writes with it on a plate the various attributes of Allah. By means of a little more of the mixture, the writing is carefully washed off the plate into a cup, and is given to the patient to drink. The camphor has a soothing effect, and the *pepo* then states who he is and what he wants as a propitiation.

The *fundi*, having recognised the *pepo* as one of his set, now comes to an agreement with the relations of the sick person as to the amount of the fees to be given to him. These vary according to the financial position of the relations, but generally range from 5Rs. to 10Rs. Much higher fees are sometimes given, however, and the total expenses, including the cost of the food for the *fundi*, the drummers, and the guests have been known to amount to 300Rs. The *fundi's* fees are paid after he has succeeded in getting rid of the *pepo*.

The drumming and dancing invariably take place indoors, except on the last day when the patient is practically cured, and then the dancing goes on outside the house.

The various kinds of *pepo* believed to seize people in Malindi are:—

- Pepo ya ki-galla*
- Pepo ya ki-sunya*
- Pepo ya ki-shakini*
- Pepo ya ki-rimu*
- Pepo ya ki-nyiku*
- Pepo ya ki-pemba*
- Pepo ya ki-habshi*
- Pepo ya ki-arabu*
- Pepo ya ki-somali*
- Pepo ya ki-nubi*
- Pepo ya Ng'ombe*
- Pepo ya Funda*

The names of the *fundis* now practising in Malindi are as follows :—

Mohamed bin Mhaji  
 Make Chocho  
 Habiba wa Jora  
 Biasha wa Ali  
 Shaibu wa Saburi  
 Fundi Ali  
 Fundi Matano  
 Said wa Farnao  
 Hussein (a police constable)  
 Kiranja Mhaji  
 Mwalim Kai

When a *fundi* has recognised a *pepo* as one of his own, and when the bargain as to the fees to be paid has been made, he sends round to all the other *fundis* and invites them to witness his efforts to exorcise the *pepo*.

New clothes must be bought for the *pepo* in all cases, and they are worn by the patient in the manner of the tribe to which the *pepo* belongs.

The following are detailed descriptions of the procedure followed in exorcising the various kinds of *pepo* who are believed to seize people in Malindi :—

#### PEPO YA KI-GALLA.

On being called to see a sick person the *fundi* examines the patient and decides whether he is suffering from *pepo* or not. As a rule the decision is in the affirmative. He then orders a " *sadaka* " or sacrifice of food to be made. This varies according to circumstances of the patient and his relations, but it usually consists of boiled rice and goats' meat or fowl. The relations and friends of the sick person partake of this, as well as the *fundi* and his drummers. But before the meal begins, a *mealim* or person versed in the prayers of the Koran is called in and the *fatiha*—*Illa hathrati el habibi Muhamad Nabbi al mustafa* is read over three times. Both prayers and feast take place just outside the house of the patient. But the women remain inside, and the food is taken in to them.

The *fundi* then goes and gets the native medicine necessary to make the *pepo* come into the head of the patient, and state what it wants as propitiation in order to induce it to leave the body of the patient. The medicine used consists of the leaves and small roots of certain trees to be found in the bush. The special kinds of trees used are professional secrets of the *fundis*, each of whom has his own prescription. Certain kinds of sea-weed gathered from coral rocks at low water are sometimes used, and these together with the roots and leaves are pounded together so as to form a paste which is mixed with water and placed in a pot to boil over a fire in the sick-room. The patient is then made to sit on a stool or native bed

over the pot, or as close as possible, and is entirely covered over with a sheet so as to receive all the vapour from the pot and the heat from the fire.

While this primitive method of giving a Turkish bath is being carried out, the *fundi* chants an appropriate song of praise to the *pepo*, and the women, if they know the song, join in and clap their hands in time to the tune. This ceremony takes place soon after sunrise, at mid-day, and in the evening from about 7 p.m. to 8.30 or 9 p.m., each session lasting about an hour to an hour and a half, more or less. After each session the *fundi* questions the *pepo* to ascertain what *pepo* he has to deal with and what propitiation it requires, but the *pepo* may refuse to speak at once, and the same ceremonial is repeated every day up to seven days. If by that time the *pepo* has not spoken, the *fundi* usually comes to the conclusion that the *pepo* in question is not one of his clientele, and he suggests that some other *fundi* be called in.

If, however, success is attained in making the *pepo* speak through the lips of the patient, which is very often the case owing to leading questions being asked by the *fundi*, and perhaps to a certain amount of mental ascendancy on his part, to which a hypnotic element may not be foreign, arrangements are then made to fulfil the desires of the *pepo*, which invariably take the form of an *ngoma* or dance repeated every day for seven days, with or without a *pepo* feast, and a male goat to be ridden by the *pepo* on the last day of the dance.

Before the dancing begins, new clothes are bought for the *pepo*, and the patient puts them on. If the latter is a man, a white cloth is tied round his chest and hangs down to his feet and another white cloth is put over the head and shoulders in such a manner as to leave only the face visible, the head and neck being covered. A pair of white cotton trousers tight at the ankle are also worn. If the patient is a woman the same clothes are worn, but the first-mentioned cloth is tied round her waist, and not round the chest as in the case of the man.

Guests are invited, both men and women, but the majority of the dancers at an *ngoma ya pepo* are women. The latter are the only ones allowed to enter the sick room, except the *fundi* and his drummers, and one or two male guests by request of the relations of the patient. The *fundi* and his drummers may also sit in the *ukumbi*, or entrance to the house, according to the wishes of the relations.

The dancing begins at eight or nine o'clock in the morning and lasts for two or three hours, or until the patient, impelled by the *pepo*, lifts his hands as a sign of having had enough for the time being. A second session takes place the same day from about 6 p.m. till 9 p.m., and so on every day till the seventh day.

*Pepo ya ki-galla* generally begins to take part in the dancing on the third day of the dance. The patient, while still seated, begins to jerk his shoulders backwards and forwards and up and down, in time to the drumming. Then he gradually rises from his seat. A fly-switch, made from the tail of any wild animal which could be used for the purpose is placed in one hand, and a small calabash filled with leaves

supposed to have medicinal properties is placed in the other. A string of oval iron bells (*njuga*) with a pebble inside is tied just below his right knee, and he then shuffles forward alone, dragging his feet. He takes up his position between the two lines of dancers, one at each end of the room, and shuffles backwards and forwards between the two lines of dancers while waving the fly-switch and the calabash, and still jerking his shoulders as described above. The two lines of dancers move their shoulders in the same manner, but remain in the same place.

These proceedings are repeated twice a day, morning and evening, until the evening of the seventh day, when the session is prolonged through the night well on into the next day, sometimes even until mid-day.

During the last dance, the cloth over the head of the patient is allowed to drop on to his shoulders, and another white cloth is put on his head and is kept on by a cord being wound round the temples after the manner of the Beduins.

If the *pepo* has required the production of a goat amongst other things to be done for his propitiation, a male goat is now produced and brought to the door of the house. The patient comes out and strokes the goat, passing his right hand three times from its head along its back to its tail. He then gets astride of it and pretends to ride it like a horse, jumping up and down, and jerking his shoulders as before in time to the drumming.

If at any time the *pepo* calls for food, a small piece of bread is produced, on which is placed a speck of ambergris and musk, and it is then placed in the mouth of the patient, who eats it. A few raisins are also given, and a lump or two of sugar candy.

After the patient has got tired of riding the goat, the *fundi* asks the *pepo* in the presence of the assembled guests if he has received all he had asked for. The *pepo* says "yes." The *fundi* then asks him if he will ever seize the patient again, to which the *pepo* replies, "I will not seize him again," and thereupon he is considered to have taken his departure, and the patient goes to bed to sleep off his fatigue, and awakes later to find himself quite cured.

There are about fifty propitiatory songs for the *pepo ya ki-galla* known in Malindi.

The names of some of the *pepo ya ki-galla* who are believed to possess people in Malindi are as follows:—Guyo, Barsa, Godana, and Galgalo. All these are common Galla names.

The drums used are two *Fumi* drums, one *Chapuo* drum, and *Vitasa* cymbals, all described in the Shebwani dance.

#### PEPO YA KI-SANYE.

The ceremonies and medicines used to cast out a *pepo* of the Sanye tribe are exactly similar to those used in connection with a *pepo* of the Galla tribe. The only difference is that the *pepo* speaks the Sanye language through the medium

of the patient, and the propitiatory songs are also in the Sanye language, although Galla songs may also be sung effectively.

The names of the *pepo ya ki-sanye* who are believed to frequent Malindi are merely common Sanye names.

The same drums and cymbals are used as in the *pepo ya ki-galla*.

#### PEPO YA KI-SHAKINI.

The people of Malindi do not know here where the Shakini country is. They tell one vaguely that it is *mbarani mbali sana*, that is somewhere in the distant interior of Africa. The Shakini language is said to be understood by the Zigula people. The *pepo ya ki-shakini* is thought to have been introduced to Malindi by slaves brought from the interior, but very little is known of its origin.

The ceremonies which take place at the casting out of a *pepo ya ki-shakini* are exactly the same as those of the *pepo ya ki-galla*; the roots and leaves which make up the ingredients of the medicine used to make the *pepo* speak are, however, different, but the medicine is applied in the same way, that is by means of a Turkish bath.

The clothes worn by the patient when the dancing begins are similar to those worn by a person possessed of a *pepo ya ki-galla*, only the clothes are made of a dark blue cotton (*kaniki*) instead of white cotton (*amerikani*). The trousers worn may be made of blue cotton cloth or red cotton cloth (*bendera*). On the last day of the dance the white cloth worn on the head of the patient suffering from *pepo ya ki-galla* is replaced by a red or blue cloth secured on the head in the same way, by a cord bound round the temples. Formerly, when colobus monkey skins were obtainable, the head-dress consisted of a conical hat made from these skins, about a foot to fifteen inches high, in the shape of a dunce's cap with a peak to it in front, and the monkey's handsome tail hanging down behind. A leather breast-plate and back-plate connected by straps that hang over the shoulders are also worn as an ornament, being profusely decorated with beads and kauri shells. This is called a *torosi* (a Ki-rima word), and is worn on the last day of the dance.

The dancers of the *pepo ya ki-shakini* form a circle, one behind the other, and move round and round with short jerky steps in a direction opposite to that of the hands of a clock, and stamp their feet in time to the drums. They move the upper part of the body by alternatively throwing the chest forward and the shoulders back and then the shoulders forward and the chest in. The patient dances along with the others, and waves a fly-switch made from the tail of a mule or giraffe.

The *pepo* of the Shakini tribe are believed to be very fond of tembo, and the patient is given frequent libations of this drink. But he cannot tolerate the smell of mutton, and all cooking of this meat must be done at a distance while the patient is possessed of this *jin*.

On the last day of the dance a male goat may be produced if the

*pepo* so desires, and the same ceremony is gone through as for the *pepo ya ki-galla*.

The songs of praise of the *pepo ya ki-shakini* sung in Malindi amount to about twenty-five.

Some names of *pepos* of the Shakini tribe known here are, Shinga Kamba wa Goshi, Hotea, Shingwa Rambo wa Seraf, Giwa wa Mwenne Panganga Waso wa Jentangu.

The same drums and cymbals are used as in the *pepo ya ki-galla* dance.

#### PEPO YA KI-RIMA.

The origin of these *pepo*, as their name indicates, is of course well known, but their introduction to the Malindi District dates only to nineteen years back.

The ceremonial followed is the same as that of the *pepo ya ki-galla*, and of the *pepo ya ki-shakini*. The head-dress is, however, different, and consists of what is called a *shumburere*, which is of exactly the same shape as a Mexican hat with a tall conical crown and a very wide brim. It is woven from the split fronds of the dom palm or the *mkindu* palm, the wild date. From the outer edge of the brim is suspended a fringe composed of strips of coloured cloth which hang down to the pit of the stomach in front, and to the same level at the back. The head and face of the patient are consequently completely hidden.

As in the Shakini *pepo* dance, the dancers follow each other round and round in a direction opposite to the hands of the clock, and perform the same steps and antics as in the *pepo ya ki-shakini*. The patient also waves in the same manner a fly-switch made out of the tail of a mule or giraffe.

The patient is anointed with castor oil as soon as he shows signs by jerks and twitches that he is about to begin to dance.

The *torosi* breast-plate and back-plate of leather are also worn by the patient in this dance, and a male goat is produced if so required by the *pepo*, and is ridden and danced round in the same manner as described in the *pepo ya ki-galla*.

There are some forty songs known in Malindi sung in praise of the *pepo ya ki-rima*.

Some names of these *pepo* known here are, Lairan wa Laitua, Laitoni wa Laimoran, Lukwalla wa Lugawane. They remind one of Nandi or Masai names.

The same drums are used as in the *pepo ya ki-galla* dance.

#### PEPO YA KI-NYIKA.

This is considered a benign form of *pepo* who does not cause the patient any great pain or ill, nothing more serious than a headache or a cough, which do not incapacitate the person possessed.

Native medicine is not usually given in order to make the spirit speak and say who he is and what he wants. He is generally recognised by the ache or pain he

causes to the patient, and he is not exacting in his requirements of propitiation. Generally two or three days' dancing will satisfy him together with a large supply of boiled mealie-meal served with grilled fowl or goat. Sometimes as a special treat some *kunde* beans are mixed with the meal. This is given as a farewell dinner to the *pepo* after the dancing is finished. All the guests partake of it as well as the patient.

The dancing begins about 9 a.m., and lasts about an hour and a half. The patient then goes about his work as usual. In the evening the dancers reassemble and dance through the night with the patient. A line is formed, and one dancer at a time advances to where the drums are being played, jerks his shoulders about while bending over one of the drums for a few minutes, then suddenly stamping his foot he retires with a shuffling step back to his place in the line and another dancer goes forward and repeats the performance, and so on. The patient dances with the others, but is distinguished by having a fly-switch in one hand and a live fowl in the other, both of which he waves about.

The patient is dressed in two new dark blue cotton cloths (*kaniki*), worn as a Swahili woman wears her *leso*. No head-dress is worn. On the second day of the dance, if the patient is a woman, she exchanges her two dark blue cloths for a kilt such as the Nyika women wear.

During the dancing, the patient goes occasionally to a pot of cold water in which leaves of wild trees believed to have certain properties have been pounded and mixed up. He puts both hands into the pot and raises some of the liquid to his mouth and drinks. Having quenched his thirst he throws some of the liquid over each shoulder on to his back, and also pours some on his chest as if he were taking a bath.

At the end of the dance on the third day a meal is partaken of as stated above and the *pepo* departs.

The names of *pepo ya ki-nyika* known in Malindi are without number, and are similar to ordinary names at present heard amongst the various Nyika tribes. The songs of praise sung in honour of these *pepo* in Malindi are also numberless.

The same drums are used as in the *pepo ya ki-galla* dance.

#### PEPO YA KI-PEMBA.

As their name indicates, these " *pepo* " are supposed to come from the island of Pemba.

In order to make the *pepo* declare himself, the usual native medicine and Turkish bath are given. The patient is then dressed in two white cloths after the fashion of the *pepo ya ki-galla*. He is placed on a stool, and as soon as the drumming begins he sways his body about in time to it, and ultimately jerks the stool which he sits on round the room. A *zumari* or clarionet (described in the Sherha dance) is also played to the accompaniment of the drums. This jerking about on the stool goes on for seven days, and on the eighth day matting is laid on the floor. The

patient sits on the matting at one end, and proceeds to jerk himself forward to the other end. On reaching this he jerks backwards without turning round. This is a very laborious business and takes a good deal of effort.

On the eleventh day the patient assumes an upright position, and dances, standing up between two lines of dancers. He advances with short shuffling steps to the line of people in front of him. On getting within a couple of feet of them he begins to retire, shuffling backwards without turning round, and keeping his body bent forwards almost at a right angle with his lower limbs. He is followed by the line of dancers facing him, who dance the same shuffling step, and who keep within a couple of feet of him. On reaching the line of dancers behind him, he straightens his body and starts forward again, the line facing him then retiring and the line behind him following him. He waves a fly-switch in his hand, and a string of small oval iron bells, *njuga*, with pebbles inside, is tied round his right ankle.

No head-dress is worn by the patient, but a paste is made by pounding to a powder a certain scented wood called *udi*, and mixing it with water. This is applied all over the head. If no *udi* wood is available, the wood of the *muhuku* is used. A black line about half an inch wide is also painted from the tip of the nose over the head to the back of the neck.

On the last day of the dance, fruits and delicacies in very small quantities are laid before the patient, who eats a little of each for the benefit of the *pepo*.

If the *pepo* demands it, and the financial position of the patient will allow of it, a white bull or a male goat is produced on the last day, and is ridden and danced round by the patient as described in the ceremonies which take place to expel a *pepo ya ki-galla*, after which the *pepo* departs from the sick person.

The names of some of the *pepo* known in Malindi are, Mwana Mashungi wa Ukulu, Kekecha wa Mawamba, Makata wa Mapinga, Maungua wa Maamba. A great many propitiatory songs are also known at Malindi.

The same drums are used as in the *pepo ya ki-galla* dance.

#### PEPO YA KI-HABSHI.

The Abyssinian spirit is not believed to have seized anyone at Malindi yet, and very little is known about it here. It is, however, believed to have possessed people in Zanzibar and Kismayu.

#### PEPO YA KI-ARABU.

The ceremonies which are gone through to expel a *pepo* of this variety constitute a type which is followed with slight variations in exorcising almost all the *jins* believed to belong to Moslem tribes.

The fundamental difference between the method of treating heathen *pepo* and Moslem *pepo* consists in the substitution of strong perfumes for the Turkish bath method, in order to induce the *pepo* to declare himself.

The preliminaries are the same as those described in the *pepo ya ki-galla* up to the point where it becomes necessary to ascertain what the *pepo* requires as a bribe or propitiation to depart from the body of the person whose sickness he is believed to be causing.

In order to get this information from the *pepo*, a mixture is made of rose water, ambergris, musk, saffron and camphor. Using this as an ink, the *fundi* writes on a plate the name of Allah with His various attributes (the all-powerful, the all-merciful, etc.), also the names of some of the archangels. The writing being completed, it is carefully and reverently washed off the plate into a cup with a little more of the mixture above mentioned. The contents of the cup are then given to the invalid to drink, and incense is also burnt beside him. In a short time the *pepo* comes into the head of the patient and states who he is and what he wishes.

Arrangements are then made for a dance, and guests are invited in the usual way.

New white cloths are put on the patient, who wears them in the same way as *lesos* are worn by Swahili women. A pair of trousers, tight at the ankle, is also worn.

The patient sits on a stool and gradually begins to sway his body in time to the drumming. Later on the swaying becomes more and more accentuated, till it develops into jerks of the body of sufficient violence to move the stool, on which the patient sits, all about the room. Ultimately he becomes sufficiently excited to stand up and dance with a sort of gliding step, backwards and forwards between two lines of dancers, who imitate his step and gestures. In each of his hands is placed a small white flag, on which is written the verse of the Koran *Ayat il kursi*. The flag in his left hand he holds over his left shoulder, and the one in his right hand he waves about. A *maharuma* or Beduin head-dress is secured on his head, but if none is available an ordinary white cap will do. On standing up to dance the patient must change his clothes. He discards his two white cloths, and if the *pepo* who possesses him has been ascertained to be a male he dons a white *kanzu* as worn by men. If the *pepo* is a female, then a short *kanzu* of some coloured material or, if possible, of silk such as the Arab women of Muscat wear, is put on by the patient.

If a male *pepo* seizes a man, or a female *pepo* a woman, there is believed to be little hope of the recovery of the patient, whose fate is practically sealed. If on the other hand a *pepo* of one sex seizes a human being of the opposite sex, then the recovery of the patient is assured.

The drumming is accompanied by songs in Arabic appropriate to the occasion, and usually in praise of the spirit.

At the end of the dance on the last day, a feast is given to the *pepo*, with delicacies consisting of small quantities of Turkish delight (*halua*), powdered white sugar, white lump sugar, moist sugar, sugar candy, almonds, raisins, milk, eggs, young coconuts (*dofu*), but of the pale coloured variety, rose scent, scented oil and European scents.

If the patient can afford it, a white bull is produced and, dressed in his best turban with dagger and sword, the patient mounts it like a horse. It is then led round and round the dancing ring in the open, while he flourishes his sword and shows off generally. If the patient is a woman, the dagger and sword are dispensed with.

Some names of Arab *pepo* known in Malindi are, Maruhani bin Kaftan, Luranni bin Dervess, Rikh bin Zariha, Duban bin Dabran, Amir Ghaish bin Sudian, Jinwi bin Jiman, Hodeida binti Jabal Duhan, Sharua binti Haruta, Saida binti Saida, Saida binti Kisti, Zilzalla binti Harun bin Alwan.

The patriarch Noah is said to have had great ascendancy over Arab *pepo*, and each time his name is mentioned the *pepo* will give a start.

The *pepo ya ki-arabu* are the only *pepo* who appear to have sex distinction. All the other seem to be sexless.

*Tari*, or tambourines, described in the Chama dance, and a *vumi* drum, described in the Shebwani dance, are used.

#### PEPO YA KI-NUBI.

This *pepo* is unknown in Malindi, but used frequently to seize people in Takaungu, and does still occasionally. His introduction to that town took place at the time when Said Barghash, Sultan of Zanzibar, maintained a garrison there under Liwali Salim bin Hamis, father of the present titular chief of the Mazrui tribe, Rashid bin Salim. Some of the *askaris* of the garrison were Sudanese, and the introduction of the *pepo ya ki-nubi* is without doubt due to them.

This *jin* is a Moslem, and the preliminary ceremonies carried out to make him speak are the same as for the *pepo ya Ki-arabu*. He is not an exacting spirit, and two or three days' dancing and drumming will satisfy him. He does not require any *sadaka* to induce him to speak, but will eat ordinary food, and in the matter of raiment, any clothes will do. In fact he is a mild fellow, and is rarely the cause of any serious ailment.

On the arrival of the guests, a ring is formed in the open, the dancers facing inward with the sick person amongst them. They move round and round the circle in the opposite direction to the hands of the clock, jumping and jerking their shoulders about. The drums, consisting of three *msondo* (described in the Ki-Nyasa dance), are played in the centre of the ring, together with the *zumari* or clarionet (described in the Sherha dance). The dancing begins at 3 p.m. and goes on well into the middle of the night. This is repeated for two or three days.

The last dance continues right through the night to the next morning, when the dancers disperse. As the dance is just about to break up, the sick person makes a rush to a cauldron placed a few paces away from the dancing ring, and filled with water. He plunges his head and shoulders into the water, and the *fundi* and several muscular friends hold his head under water until he begins to struggle from loss of breath. They let him struggle for a minute or so, and then release him.

Instantly he makes a dash back to the dancing ring and prostrates himself on the ground near the drums, probably from exhaustion. But he is not given much time to consider what ails him, for he is closely followed by the *fundi* armed with a *bakora* or cane, who rouses him with a smart cut across the shoulders. The patient jumps up in fear of receiving another blow of the *bakora* and is surprised to find himself quite cured. He returns home to sleep off his fatigue.

Some names of *pepo ya ki-nubi* are Fatuma wa Abdalla, Abdeh wa Hamdeh, Tai wa Yusuf, Saida wa Abana.

There are no *fundis* of *pepo ya ki-nubi* at Malindi, and it is doubtful if any remain at Takaungu.

#### PEPO YA KI-SOMALI.

This *pepo* being a Moslem, the preliminary ceremonies are exactly the same as those which take place in connection with the *pepo ya ki-arabu*.

The dancing is also similar to that of the Arab *pepo*, but is much more rapid.

When the sick man is able to get up and dance he puts on Somali clothes instead of Arab clothes. He also flourishes two small flags with sacred words on them. If he rides a bull on the last day of the dance, he flourishes a spear instead of a sword as the Arab *pepo* does.

The drums used are the *tari* (described in the Chama dance), and they are beaten in very quick time.

The names of the Somali *pepo* are the same as modern names common to Somalis.

The same drums are used as in the *pepo ya ki-arabu* dance.

#### PEPO NG'OMBE.

This *pepo* is said to make the unfortunate person who gets it low like a cow. It is considered a dangerous *pepo*, and many people do not get rid of it without paralysis of some of their limbs or of one whole side of the body.

The procedure followed to make the *pepo* speak is the same as that in cases of *pepo ya ki-galla*, that is to say the Turkish bath.

The *pepo ng'ombe* speaks Swahili, but in a hesitating manner, and interlarded with bovine noises. Grass must be cut and brought in to him to eat. If no grass is given he will try to get out of the house to go and graze. Water must be given to him to drink in a bucket or other large receptacle, into which he puts his face and drinks like a cow. Some of the water must be thrown over the body of the patient, for, if this is not done, rigidity of the limbs is believed to set in.

If the patient's mouth begins to twist to one side, the case is considered to have entered a very serious phase, and another Turkish bath is given. The patient is rubbed with castor oil, but no other sort of grease must be brought near him, nor any kind of perfume or scent.

As soon as the patient is strong enough, dark blue cotton clothes are put on him as in the manner of the *pepo ya ki-shakini*, and he then sits up, and ultimately as he gets stronger he takes part in the dancing, which is of the same style as that of the *pepo ya ki-shakini*. He also wears a *shumburere* hat and a *torosi* (described in the *pepo ya ki-shakini*), and waves a fly-switch. The dance may be protracted to three weeks, as the illness is sometimes very stubborn. A person who has once suffered from *pepo ng'ombe* can never again tolerate the sight or smell of beef, whether raw or cooked, and sometimes even faints at the sight of it.

On being questioned as to where they come from, the *pepo ngombe* state that their home is in Guran at Bwana Manolo's. There is no country known in Malindi by this name.

Some of the names of *pepo ngombe* known in Malindi are : Darsheh wa Losinga, Darsan wa Bwana Manolo, Darwesh wa Bwana Msija, Lisiji wa Mpinde, Suta wa Bwana Darwasi.

The same drums are used as in the *pepo ya ki-galla* dance.

#### PEPO YA PUNDA.

This is a most serious illness, the majority of cases proving fatal. The name *pepo punda* is due to the noises which the patient makes, and which may be assimilated, with a good stretch of imagination, to the braying of a donkey. There is, however, no similarity at all, the noises made by the patient being merely hollow groans of pain, for the disease is extremely painful, and from the symptoms there is no doubt whatever that the *pepo punda* is tetanus.

The patient cannot speak. No drumming or dancing is allowed. Native medicine only is given to drive out the *pepo*. This medicine consists of a mixture of the following ingredients : *koto* (a root imported from Arabia), *udi-il-karah* (an astringent wood from Arabia), *arkisus* (a wood with a taste like pepper, from Arabia), *habbasoda* (a small seed like a cummin seed, but black, from Arabia), *khardal-filfil* (a root from Arabia with a taste like mustard), common black pepper, *yayi leusi* (a seed like blasting powder with a bitter taste, from Arabia), mustard seed, garlic, *shimari* (a seed like cummin seed), *zatari* (dried aromatic leaves imported from Arabia), also the horn or hoof of a black cow pounded up to powder. All these ingredients are boiled together and given to the unfortunate patient to drink.

A piece of hard wood scraped clean is placed between the teeth so as to allow of his being given medicine after the lower jaw has become rigid.

As soon as the spine of the sick person becomes arched, a fire is lighted in the sick room. A mixture is then made from donkey's dung, dog's excreta, garlic, *mruge*, (*asafetida*), sulphur and *sunduna* (a black kind of seaweed). All this is made into a paste by the addition of castor-oil, and lumps of it are cast on to the fire, from

which then emanates acrid smoke with an appalling smell. This is supposed to relieve the patient.

Natives do not know the origin of the *pepo punda*, and are extremely afraid of it. Happily it is not very frequent in Malindi.

**NOTE.**—The description of the above dances has been compiled by a civil officer of experience who has a thorough knowledge of Swahili. Many of the dances have undoubtedly been brought from Arabia by the Muscat Arabs, others were probably brought in by the Nabahans and the Vumba chiefs who came from Shiraz in Persia about A.D. 1100. The hypnotic seizures described in some of the ceremonies are well known in Africa, particularly among the Akamba people: the phenomena would well repay investigation by a medical psychologist.—C. W. HOBLEY, Mombasa.

#### NOTES BY A. WERNER.

- p. 415, l. 33.—This, or some similar event, followed by faction-fighting, has been celebrated by Muhamadi bin Abubakari Kijuma, of Lamu, in a poem called *Utendi wa Mkonumbi*.
- p. 419.—The Kinyago. This (called *unyago* by the Yaos and *chinyao* by the Anyanja) takes place at the initiation of young people in Nyasaland. For particulars, see Rattray, *Some Folklore Stories and Songs in Chinyanja*, pp. 178, 179.
- p. 420.—A list of *pepo*, with the appropriate exorcisms, songs, etc., as used in the Mrima region (the mainland opposite Zanzibar) is given in Velten's *Desturi za Waswahili*, pp. 149–167. The Arab *zar*, described for Mecca by Snouck Hurgronje, *Mekka* (The Hague, 1889), vol. ii, pp. 124–128), belongs to the same category.
- p. 426.—The Wasanye in the Malindi district all speak Galla, but they say their old language is still spoken by the Waboni in the Witu territory.

SOME SOUTH SLAV CUSTOMS AS SHOWN IN SERBIAN BALLADS  
AND BY SERBIAN AUTHORS.

BY M. EDITH DURHAM.

It is, as all of you know who have tried it, by no means easy to get peasants to talk about their customs. The only thing to do is to live with them and pick up information from day to day. In Montenegro I used to live for weeks at a time in a native house, an old-style one, built before Western European influence. It had a floor of uneven rock, as nature made it, save that it was polished by generations of sandal-shod feet; and the fire was lighted on the floor, and the smoke went up through the roof rafters. Our food was hung in baskets to the rafters to keep it out of reach of rats. There was a small window with a wooden shutter, and the walls were a metre thick. The inhabitants were suitably primitive.

The house consisted of but one room, but fortunately the owner's great-uncle had been a pirate, and in company with a Greek had owned a small sailing vessel fitted with a nice little cannon which plied along the Dalmatian coast and in the Aegean, and as he—as his great-nephew delicately put it—"earned a great deal," he had need of a store room, and built a small outbuilding known as the "magazine," which had an outside door locked with a huge key. The next generation lived by running contraband into Austria, and also used the magazine. At the time of my arrival the police, both on land and at sea, had entirely ruined the family trades, and I took over the magazine. Here I slept and kept my things. Otherwise I lived just as did the others, and passed the day in the main apartment. I was the only person in the near neighbourhood who could read, except the priest, so almost every night the members of my bratstvo came in and squatted round the fire, and I read aloud. Thus we started many topics of conversation. I began with the newspaper, but the popularity of these readings made me search literature which referred to local interests. Montenegro had at that time (1904-5-6-7) a new code of laws and a law court; but the old local court was fresh in the minds of the people, and still met about wood-cutting rights and pasturage. We used to discuss the judgments given in the law court which we read in the newspaper, and people often disagreed with the verdicts and swore by God that it was better in the old days when the Court of the Good Men (*Sud Dobrik Ljudi*) used to meet before the church and decide all local cases. The Good Men were all heads of houses, I was told, and knew the customs of the land intimately. They were summoned sometimes from a wide district: the job might involve two days' journey. If a plaintiff, therefore, brought what was reckoned a frivolous, unnecessary case and wasted the Good Men's

time, it was usual to make him pay costs in the shape of a sumptuous banquet. He had to kill and roast as many sheep as he was bidden, and stand a vast lot of wine and rakia. But though everyone was certain that the judgments of the Good Men were miracles of wisdom, I failed to get any detailed cases until one day, when rummaging for ballads in a book shop at Ragusa, I found a book by Vuk Vrchevitch in which he had recorded a number of cases. Vuk Vrchevitch, though his name is not so well known as that of Vuk Karadjitch, to whom we owe the first great collection of Serbian ballads, has done even more for the anthropologist. He began by collecting ballads for Karadjitch, but he afterwards for his own interest collected a number of local customs, folk tales and fables. He was a Serb, born in the Bocche di Cattaro in 1811. He has minutely described the life in that district as it was in his childhood. He began collecting, he tells us, in 1835, and he continued until his death in, I believe, 1889. His experience was varied. He lived some time at Budua on the coast; was three years secretary to Prince Danilo of Montenegro (uncle of the present King); held an official position later for five years at Zara in Dalmatia, and was for nineteen years Austro-Hungarian Consul in the Herzegovina, then Turkish territory.

Armed with Vuk's little books I hastened back to my hut on the mountains, and the nightly readings now excited amazing interest. The tales were eagerly discussed, and every point of detail and custom corroborated by the old people, who declared it was "just like life." Many of the personages mentioned by Vuk under pseudonyms or by initials were identified, and of all the books the law cases were the most popular; for the South Slav is a highly irascible person, and will fly into a white and livid rage about nothing in particular, and the days of blood vengeance are not quite over.

I believe that none of Vuk's writings have been translated, certainly none into English. I will therefore give you a selection, choosing those cases which the Montenegrin audience approved of most. At the risk of bringing down on us the Defence of the Realm Act, I will first give you an account of the way to make peace after a blood-feud. This account I was assured was accurate in every detail.

Deposition made by a peasant of the Primorje (that is the coastland in the neighbourhood of Budua) in answer to questions, telling how he stopped a blood-feud. Written in 1851. (Literal translation rather condensed.)

"I will tell you, though when anyone reminds me of my disasters, my hair stands on end and my flesh creeps. Two years ago we were celebrating the *karitad* (funeral feast) for the deceased Knezh Duno. The whole village flocked to it, and ate and drank, by God, as much as they could, for there was nothing to pay! And all at once two little boys started fighting like two young cocks. Some folk laughed, and one woman of our *bratstvo* rushed to protect her child. Up rushed the mother of the other one and hit her on the head with a stone. Down ran the blood, and

both women began shouting awful accusations against each others' families. By God, my brothers, 'tis an awful thing when women start calling names! All our men rushed to defend their sister, and the men of the other bratstvo rushed to defend theirs, and there was a terrible fight. I killed two of them myself, and we wounded a couple, and that same woman who started all the trouble got wounded too. And my poor father was killed, and I myself was badly wounded; and if our men had not made peace, by God, there would have been a bloodbath. We buried our dead, and each took home his wounded. Then the other bratstvo threatened me and my bratstvo about the two dead heads, and they owed us one dead head and two wounds. So in a few days the village gathered together and wanted to make peace. We sent men to them and asked for truce till St. Dimitri. They gave it, unwillingly. And at St. Dimitri we begged a second truce till Christmas, and after much begging they gave it. And at Christmas, as is customary, when we asked for a third truce we asked too for arbitration." (*Kmetstro*, i.e. that it should come before the Kmets. Note, that if truce be accepted three times it meant always that the case would be arbitrated. Often the third truce was refused and blood vengeance was taken.) "We fixed it for St. Sava's day. They gave us the names of twenty-four men of the Primorje and Montenegro, and off went I over rocks and woods begging the men to come. Luckily none refused." (Note, the kindred of the injured party have the right to nominate the judges; the defendant has to summon them. If one refuses, the thing fails, and a new start must be made.)

"St. Sava's day came. I killed two oxen and six sheep, and took four hams and bought two barrels of wine. I collected my bratstvo, and my *Kums* (godfathers of marriage and of baptism) and, may God forgive me, they helped me with bread and with money. So I had all that was needed, and the men arrived, and seated themselves, and gave judgment thus.

"The head of Nikola Perovo was held as equivalent to the head of my dead father. For the head of Gjuro Tripkov they ordered 120 zecchins (about £50) to be paid." (Of this fine one-third was the perquisite of the Kmets, and the rest went to the family of the dead man. If the family were poor the Kmets often gave the whole sum.) "One of their wounded was held equivalent for my wound. Their other wounded was valued at seven bloods;" (A blood was paid for by 10 zecchins. The judges estimated the fine according to the severity of the wound.) "And the wound of that woman was reckoned at three bloods. And they judged further that I was to bring six infants" (that is that they should be baptized with men of the other bratstvo as godfathers, and thus the two bratstvos acquire a spiritual relationship which ranked as consanguinity). "And that I should hang the gun that fired the fatal shot round my neck and go on all fours forty or fifty paces to the brother of deceased Nikola Perovo. And I hung the gun round my neck, and began going on all fours crying, 'Take it, O Kum, in the name of God and St. John.' But I'd not gone ten paces when all the people jumped to their feet and took off their

caps, and shouted as I did. And by God, though I had killed his brother, the way I bowed down horrified him, and the blood rushed to his face when he saw all the people with their caps in their hands. He ran up and took the gun and took me by my pigtail and raised me up, and as he kissed me the tears ran down his face, and he said, 'Happy be our *Kumtevo* (Godfatherhood).' And I wept too and kissed his hand, and I said, 'May our love be to us a great good fortune; may our friends rejoice and our enemies envy us.'

"Then our married women carried up the six infants in their cradles, and he kissed each of his six godchildren. And then the whole company came to our house and sat down to the well-covered table. And the man at the head of the table took a jug full of wine and said, 'May God give health and happiness this day and for ever to this house and its master. May God help the new godfather, and may his godfatherhood bring lasting peace.' Then they drank off their wine to the dregs, and he cried out, 'Where art thou, O housemaster (*domachin*), and thy brethren who stand round ?' (*Nastognitzi*—those that stand round—are the housemaster and all his male relatives who under such circumstances never sit at the table, but wait on their guests.) "'Bring the bloodgelt to the table.' Then my uncle replied, 'By God, my brother, and you other gentlemen, there is little money in this house; but thank God we are a fine lot of brethren, and each has his richly-mounted weapons. Here are they and here art thou. Now do as God directs thee.' Then our men brought each a knife or a gun or a pistol, and one his gaiters embroidered with gold, and laid all these things before the *Kum* crying, 'Take as much as thine honour permits.' But he was indeed a man. He did not take one. He took only the *krenitza* (the bloodshedder), and he kissed it on the muzzle and wept. And all praised him up to the sky and each went back home. And we christened the six infants, and then went home too, and ever since we have been such friends that two brothers from the same womb could not love each other more."

As happens in other lands, a large number of the cases for trial arise about women. Vrchevitch gives the following strange case, which he writes in 1850, giving false names, the parties being still living.

It occurred in Montenegro. Mordyen Vasiliev hired as shepherd one Vlaho, a Catholic Slav from a village near Ragusa. The village objected to the introduction of a foreigner, more especially as he was a "Latin," saying why could he not hire a Montenegrin, for "a cabbage from your own garden makes neither your head nor your belly ache."

Nevertheless Mordyen kept him, and the indignation in the village was extreme when it was found that two girls who kept sheep on the same mountains were both with child by him. Vlaho tried to bolt, but was detained. The parents of both of the girls each demanded that he should marry their girl or pay with his life. They threatened also the life of Mordyen because he had persisted in employing a foreigner. The affair made a great sensation, and all the elders of the village were

summoned one morning before the church except the two fathers and Mordyen. Mordyen was first called before them, and declared he was not to blame for his servant's misdeeds, which angered the village council very much. Vlaho blamed the girls, who, he said, would never leave him alone. The headman of the council thereon declared that, having shamed not one, but two families, he deserved not the knife or the gun, but to die under the accursed stone heap.

The two fathers both wanted vengeance. The council then debated the question, and first decided—

That the two fathers were not free from blame, inasmuch as they had kept no watch over their daughters.

They gave as verdict, therefore : " We find all four, Mordyen, Vlaho, and the two fathers blameworthy, and lest more evil should befall we judge thus : 1st. That Vlaho Konivala to-day and in our presence shall choose one of the two girls and marry her, and that all three shall go and live at Mordyen's house till the other girl shall be delivered of her child. Then shall Vlaho take his wife and his two children and go away out of the country and never come back. 2nd. That Mordyen shall take them all three into his house and feed them all till the second child shall have been born. 3rd. The father of the girl whom Vlaho chooses to wed shall give her all the clothes that are in her dower chest. As for the other girl, let her go home and wait for other luck, having lost her first so foolishly."

This illustrates the intense dislike of a stranger entering the tribe. The Employers' Liability Act is stretched to a truly terrifying extent, and the whole expense falls on the luckless Mordyen. Another point illustrated is the suggestion of the headman of the village that Vlaho deserves to die under the stone heap. Stoning to death—each man putting a curse on the stone before throwing it—was an ancient Balkan custom. When, in 1903, I expressed the opinion in Montenegro that Europe would not approve of the murder of Queen Draga of Serbia, more than one woman declared violently to me that shooting was too good for her, " She ought to be under the accursed stone-heap " (*prokleta gomila*). And only the other day we were told that the Greeks assembled in thousands near Athens and solemnly cursed Venizelos as a traitor, each casting an accursed stone into a pit. In Montenegro there are many stone heaps, some very large ones, of which the popular tale is that a very wicked man lies beneath them, and the passer-by still hurls the stone and the curse. My own guide took a peculiar pleasure in this pastime, and always added at least half a dozen. Some of these heaps were, I believe, originally ancient tumuli. I could get no recent account of any. " The grave of a very wicked man " was the unvarying tale.

Vuk Vrchevitch states that a horrible case of stoning to death did, according to local telling, actually take place in the Bocche di Cattaro about the year 1770, and as this is but forty years before his own birth, the tale is probably true, but it is peculiarly brutal. A youth and a girl were betrothed by their parents. Owing

to various reasons the wedding was postponed. The girl was then found to be pregnant, and the whole village said its honour was blackened, and insisted on calling a council of Good Men to decide what should be done. The youth in vain offered to marry the girl at once and take her away; but this did not satisfy the demand of the village for punishment. The priest, who formed, *ex officio*, part of the council, was told to ascertain the law. He, having no other book, looked in the Bible, and declared that the punishment was stoning. He, however, begged for mercy, and suggested that the couple should be driven out of the district and forbidden to return. The populace, however, jumped at the idea of the "accursed stone" heap, and buried both the poor creatures under a hail of stones, forcing their parents—if they wished to be considered honourable—to add to the heap.

The village audience to whom I read this thought it very unjust, but probably true; added to that, perhaps, it saved bloodshed in the long run, as there would have been a blood-feud between the families of the youth and maiden, and many men might have been shot. The girl's family would have had to wipe out the stain on its honour with blood.

Among the North Albanian tribes, who still have local laws and courts, I found that the woman in such cases was rarely if ever punished. She was regarded as not responsible and as the property of her family, who took vengeance for damaged goods.

Vuk records a curious case of a woman who married a second time, her husband having left her nine years ago and she and all the neighbours believing him to be dead. She married, too, with the entire approval of her parents-in-law, with whom she was living. After a year of marriage the first husband turned up and claimed her. A council was called to decide the case. It was decided that no blame attached to the woman, but that as she belonged to her first husband she must return to him. The poor woman pleaded that she was expecting a child by her second husband. The court therefore decided that she was to remain in his house till the child was born, and then to leave his child with him and return to the first man, which decision, says Vuk, was carried out.

Vuk gives another curious matrimonial decision in a case which, he says, occurred in the latter half of the eighteenth century. He gives only the initials of the parties, or names which, he says, are not the right ones, so presumably the families were well known.

A well-to-do man of Perasto in the Bocche di Cattaro, Vuk's own birthplace, had a son, one Vitzko, the sole survivor of four. The father was therefore very anxious to arrange a marriage for him as soon as possible, in order that the family might not die out. Vitzko flatly refused, saying that he would marry no one but the wife of Kapetan Yozo, the owner of a small trading vessel. The Dalmatian coast is a very squally and dangerous one, and as the Kapetan had been absent a considerable time and there was no news of him, the couple were waiting only to hear

he was safely drowned in order to get married. The father in vain remonstrated, and then home came the gallant Kapetan with a pocketful of money. Local gossip, of course, at once informed him of his wife's flirtation, and he rushed out in a towering rage in search of Vitzko. It was Sunday, and Vitzko was in church. The Kapetan awaited him at the door, accused him, and calling on him to defend himself, at once drew his sword and attacked. Vitzko too drew his sword (a straight short sword, called a handzhar, was in those days always carried thrust through the sash in front). They flew at each other, and hacked so furiously that in a moment the huckle Kapetan fell dead, and Vitzko fell very severely wounded. The men of the Kapetan's bratstvo rushed in to finish off Vitzko. Vitzko's bratstvo rushed to his defence, and a general fight took place. Two on each side were severely wounded, and then, other members of the congregation coming out of church, and belonging presumably to other bratstvos, intervened and separated them with difficulty. The headman of Perasto and the heads of the chief houses then made them swear a truce for two months, and ordered that at the expiration of that time a council was to be called in order that peace might be maintained in the district.

No decision could be made till it was known whether Vitzko would survive. Meanwhile the Kapetan's brethren buried him, and denounced his wife as his murderer. Her mother-in-law drove her from the house, and she fled to her parents.

Vitzko recovered from his wound, and the Good Men met in council at the appointed time. It consisted of all the heads of houses in Perasto except the two that were in blood. They, twenty-two in number, decided that the dead head of Kapetan Yozo was to be held equivalent to the wound of Vitzko and for the wounds of his two relatives; and for the attack on his honour, because the Kapetan had forced a fight on him without waiting to investigate the case, the court, having made enquiries, was of opinion that the honour of Kapetan had not suffered, and that the affair had not gone farther than words.

They decreed, however, that in no case was Vitzko to marry the Kapetan's widow, but that within a year, at the outside, he was to select any maiden he pleased and marry her. Should he refuse he was to be expelled from Perasto, and his property be forfeited to the church.

They decreed further that at Vitzko's marriage he must summon two cousins of the deceased Kapetan to be respectively godfather at the marriage and to the first child; and that, further, Vitzko is to swear blood-brotherhood with them (*pobratimstvo*), and give them the usual gifts (often of great value, and including many embroidered garments and especially ornamental socks).

That the widow of the Kapetan had acted like "a long-haired, short-witted woman" by talking of marriage before knowing if she were a widow, but had not, in fact, blackened the Kapetan's honour. And in order that there shall not be further quarrel over the death of the Kapetan, his brethren and his widow's brethren are to meet next Sunday and kiss one another before the priest, and try to arrange

between themselves that the Kapetan's widow shall return to his house that she may take care of her children, but they leave this to the decision of the two families.

These decrees, says Vuk, were carried out. Vitzko married at once, but of what happened to the unlucky widow there is no record.

My audience considered that it was quite right not to allow the marriage of Vitzko and the widow, and agreed with the verdict entirely.

The following, which Vuk calls "Slaying without ill-will," is judged more in accordance with our notions.

It occurred at Pobor, in the Bocche di Cattaro in 1820. Radé Nikolina, a well-to-do and respected man of Pobor, had a large number of bees. These in the Balkans are kept in tree-stumps. Honey is largely used for making mead. Radé's bees all died mysteriously, and he did not know how to replace them. His sworn-brother, Malish Yovitchin from Montenegro, visited him and said that there was only one way it could be done. He must buy one bee-stock, have a second given him, and steal a third; only so would the bees stay. Radé bought a bee-stock from his aunt, and got his brother to give him one; but he was an honest man, and was worried about the stealing. Finally he decided to steal a bee-stock from his neighbour, Yovash, who had a great many, and that he would either return it or pay Yovash at the end of the year.

He explained this to his son Nikola and his nephew Iliya, and they went at night to Yovash's bee-yard. Radé kept watch while the boys went in. Iliya ran out with a bee-stock, and they were all running home when Yovash's dog gave the alarm. Out came Yovash and his sons, of course with guns in their hands. They shouted "Stop!" and getting no answer, fired. Poor Radé dropped down dead.

Radé's brethren next day denounced Yovash as blood-guilty, and demanded a dead head of Yovash's house. Yovash regretted having killed so worthy a man, and explained what had happened. Having challenged the thieves and receiving no answer he had fired. He was not therefore guilty of wilful slaying.

The headmen of the district made the two bratstvos swear truce for a month, and then summoned a council of twenty-four chosen headmen, who met before the church. The contending parties appeared before them, and after hearing the evidence the council judged as follows:—

"Let it be known that we, headmen chosen from among the householders of Pobor, have met in order to make peace between the bratstvo of Nikola Radovo and that of Yovash Miyatov, who are at blood about the death of Radé Nikolino. We are of opinion that the deceased Radé has always lived and acted honourably. We therefore recognise that Radé did not go as a common thief, but because he believed it necessary to steal the third bee-stock, and that he meant to pay after a year. We find that Radé was wrong not to reply when he was challenged, and thus to throw away his life for a thing of no value.

"We therefore judge that Yovash did not wilfully slay him, but unfortunately,

and that therefore Yovash does not owe a head to Radé's family; but, admitting that it was fated that Radé should die, and that when his hour has come no man can escape death, yet in the eyes of God and man it is not right that a man's head should be lost for a bee-stock. Therefore, in order that peace and friendship may be made between the two bratstvos, we judge that Yovash shall pay all the funeral expenses, and that on the next feast of the Ascension of the Virgin he shall receive Nikola Radov at his house and shall give him three wet godfatherhoods (shall be godfather at the baptism of three children of the bratstvo), and shall swear also three blood-brotherhoods and give the usual gifts. Thus do we judge, and set our signatures to it."

I enquired how it was that so large a supply of unbaptized infants was available, and was told that in those days it was customary to postpone baptism till one of these occasions turned up. As godfatherhood was, and is, reckoned as a blood relationship, baptism was often postponed not only in order to be ready for the settling of a possible quarrel, but also sometimes in order to find a powerful relation.

The above are samples of a local court.

It happened sometimes that the local court could not agree, for their decision had to be unanimous; or else that they agreed but the contending parties refused to accept their decision. In that event the case was taken to Cettinye and laid before the ruling Prince and his senators, and this was the final court of appeal.

Vuk Vrchevitch gives a case which occurred while he was secretary to Prince Danilo in 1853.

It was that of a deadly quarrel between two cousins whom Vuk calls Stanko and Yokash, the sons of two brothers, Nikola and Golub, who lived in the Crmnitza nahia. The two boys were very fond of one another, and inseparable comrades till they were sixteen years old, when, as was customary, they were given weapons and reckoned as men. They then had a quarrel about a girl, and though they made it up there was thenceforth considerable jealousy between them.

In January, 1853, the Turks attacked Montenegro. There was severe fighting: Stanko and Yokash took part in it. Both rushed together to cut off the head of a wounded Turk. Yokash reached him first, and seized the wretched Turk by the pigtail. Stanko rushed up and seized the Turk by the throat. Each youth yelled to the other, "Let go! The head is mine!" But Yokash knew he had a right to it as he first had grabbed the pigtail. Neither would give way. Yokash drew his knife and accidentally wounded his cousin on the hand. Stanko at once tried to kill him, but the other men of the tribe prevented him. Yokash got the head.

Stanko was furious, both at losing the Turk's head and at the wound on his own hand, and swore vengeance. The feud between the two cousins became so violent that the kapetan of the district was appealed to by their parents. His efforts at peacemaking failed entirely, so to prevent bloodshed and a family feud he sent the parties to Cettinye, together with a letter explaining the circumstances.

Brought before the Prince, each boy still maintained that the head was his. Yokash said he had first seized the Turk by the pigtail. Stanko declared that it was he that had wounded the man, and he had a right to take the head. He did not so much mind about cutting it off himself, but that in honour Yokash should have given it to him when cut off.

The Prince broke off their explanations by ordering them to kiss one another and go home quietly, and added, "Look here, if you don't behave yourselves I'll have the two of you triced up to the gun before the monastery, and give you each twenty-five lashes below the belt."

When Stanko heard this, he threw himself at the Prince's feet, and prayed him by heaven and earth and the three saints<sup>1</sup> of Montenegro to allow them to fight a duel and so settle the matter.

The Prince asked Yokash what he thought of this. He replied that he was willing either to kiss and make friends or to fight it out if Stanko wished. The Prince gave them till the next day to consider the matter.

Next day Stanko was as set on fighting as ever. The Prince decided, therefore, they should fight, though the boys' parents and many of the senators were opposed to a duel between such near relatives. The fight took place before the Prince and senators and Vuk himself. It was fought with handzhars, the short heavy Montenegrin sword. When all was ready their parents made a final appeal to them, but in vain. Each then hacked at the other, and both were very severely wounded. Stanko chopped through Yokash's left collar bone, and Yokash sliced Stanko in the right side, and cut through three of his ribs. Both were a long while recovering from their wounds, and were attended to by Dr. Ilitchkovitch, under whose son, oddly enough, I worked in Montenegro for a little while during the first Balkan War.

When the two youths had recovered they went with their parents before the Prince and asked his forgiveness, and kissed one another before him and his senators, and went back home singing happily.

This custom of appealing to the Prince has almost died out. A funny case, however, was decided by the present King of Montenegro while I was in the country.

A girl was betrothed. Her young man married someone else suddenly. In former days this would have meant a blood-feud between him and the girl's people. In this case the girl took the law into her own hands. Hearing of the faithless one's intentions, on the eve of the marriage she hurried to the place with a can of petroleum, waited till night, poured the petroleum on the thatched roof of the hut in which were the newly wedded couple, and set fire to it. They escaped with their lives, but the hut was burnt out and the bride's dower chest with it. The bridegroom at once demanded the arrest of his jilted betrothed. The King, however,

<sup>1</sup> St. Petar of Cetinye (i.e., Vladika Petar I Petrovitch Njegushi).

St. Vassili of Ostrog. } Bishops who fled from Turkish persecution into the  
St. Stefan of Piperi. } mountains. Reputed miracle workers.

dismissed the case, saying that the young man had only himself to thank for what had happened. I saw the girl, a strapping creature, who was daubed from head to foot with manure which she was carrying, so I cannot say whether or not she was attractive in appearance. My guide was of opinion that after this violent display of what she was capable of when roused, it was improbable that she would ever get anyone to marry her, though he admitted that as a beast of burden she seemed efficient.

Before passing on to another subject I would mention that when Austria was asked by Europe to occupy Bosnia and the Herzegovina in 1878, the Austrians found that the Court of the Good Men was managing all local affairs, and that the people did not at all understand other law. The Austrians therefore very sensibly, whenever a complicated local case arose which they were unable to resolve, called a council of Good Men, who always put matters straight. I was told in 1906 that recourse to the Good Men was still had sometimes.

In two of the cases I have quoted there is mention of the pigtail. Throughout South Slav lands till quite recent times the perchin or pigtail was universally worn both by Christian and Moslem. The rest of the head was shaven and the long lock plaited. Many of the portraits of Serbian heroes of the beginning of the nineteenth century show it, and in many parts of Bosnia it is still worn by the Roman Catholic peasants. It is usually coiled up and hidden under the head wrap, but in church, when the head is uncovered, you may see long pigtails hanging down, and giving a Chinese appearance to the congregation. At funerals, until about 1850, it was customary for the near male relatives of a deceased man to cut off their pigtails and throw them into his grave. One great use of the pigtail, I have been told, was to carry home heads by. The South Slavs, and especially the Montenegrins, had a passion for head-taking, excelled by head-hunters in no part of the world. We have record of the taking of huge numbers, in the poems by Veliki Voyvoda Mirko, the father of the present King of Montenegro. He published a number on the wars of 1850-60. They are devoid of any literary merit, but detail exactly the methods of the head-hunters of Europe.

Thus in 1857 after a local frontier fight : " Then the Montenegrins seized twelve horses and all the Turks' clothing and weapons, and with the Turks' heads set on poles, back they went to the village of Markovina, and before the white house of the Serdar they left eleven heads ; but the head of Betchko they carried to Cettinye, and set it on the tower above the monastery where a many have been set before and many more shall be, God willing ! " Each man was used to bring in the heads he had taken, and they were all counted after the battle. They used, so I have been told, to tie them together by the pigtails and sling them round their necks. They always stripped the dead and took the garments and weapons, which were divided by the generals, each man being given a share.

One example from a song of 1862, the Fight with Selim Pasha, will serve : " Then

they began to count Turkish heads, and found one thousand six hundred, and among them Selim Pasha's head, and Miro Dedovitch carried Selim Pasha's head, and threw it down before the Voyvoda. And Milyan began to share the booty. He shared the garments and head-dresses, he shared the saddle horses and the glittering weapons ; and he chose out twelve swords, and sent them to the Prince at Cettinje" (*i.e.* the present King).

Head-cutting was not practised in the last war, but nose-cutting was substituted, noses being more portable. This disgusting practice consists in cutting off the nose right through the nasal bone, and shearing away the whole upper lip with it. The trophy is then carried by the moustache. The extra haemorrhage thus caused usually finishes off an already wounded man ; but I saw nine poor wretches—prisoners—who had survived this treatment. Noses were collected too from the dead. Voyvoda Mirko expressly tells us in a "poem" that the Turks had to carry away their dead quickly to prevent the Serbs taking their heads.

Nose-cutting appears to have been a very old Serb custom. In the laws made by the great Tsar Stefan Dushan in 1349 we find that a married woman guilty of libertinage shall have her nose and ears cut off.

When I was first in Montenegro I was told that there was a woman still living near Podgoritza whose nose had been cut off by her husband, who suspected her of infidelity, and at the Serb village of Vraka, near the shore of Lake Scutari, I have heard of more than one case. The French Consul, Degrand, recorded one about 1890. In this case the husband continued living with his wife. I expressed surprise to my guide, who was a quite uneducated mountain tribesman, and he cheerfully said that now it would be all right : she would be so hideous there was no fear of her finding any other man to carry on with. He sang me a long ballad, which he called a "love song," in which the hero, Milosh of Drobnyak, marries a maiden by fighting another man for her and killing him, she preferring the other man. She left Milosh later for a third man ; but Milosh pursued her, killed the other man, and chopped her in four pieces, and put them on the cross-roads to warn other women to behave properly. My guide said that unfortunately the King did not allow this nowadays, but that he thought that it would be a good thing, as the morals of Montenegrin women were becoming very lax in consequence of the number of men who had emigrated to America.

A still more hideous punishment is described in the ballad of Gruitz' faithless wife. Gruitz, son of Novak, was a celebrated brigand of the fifteenth century. A series of ballads tells how he captured a wife who was betrothed to a Greek ; how she betrayed him to three Turks, who took him prisoner ; how he effected his escape, killed the sleeping Turks, and seizing his unlucky wife, stripped her and bound her in soft cotton on which he poured oil and spirit. He then buried her to the waist in the ground and set fire to her. "And Childe Gruitz," says the song, "sat and drank cold wine, and his wife lighted him as a torch."

These are but a few samples of the mass of information that is to be found in the tales and ballads of the South Slavs. There are also a number of fables more or less humorous about both men and animals.

The old Serb custom of exogamy is illustrated in almost all the ballads of the weddings of Serb heroes. Nearly every one begins: "When So-and-so wedded he sought a wife from afar." We see, too, how the wife is usually chosen in order to make a strong alliance with her family.

Of examples of blood-feuds we find enough and too many. References also to early mythology, the belief that the Serbs are related to the falcon; the Fairies, or Vilas of the mountains, and their tricks. The Virgin Mary is called Fiery Mary, and is believed to be the hurler of lightning.

Of brigandage, too, we can find much, and accounts of the everyday life of the people, what they ate and drank and wore. There is, in fact, far too much for one paper. I will only say briefly that the traditional tales form a complete cinematograph of Slav life, and recommend them to your notice.

## THE MENHIRS OF MADAGASCAR.

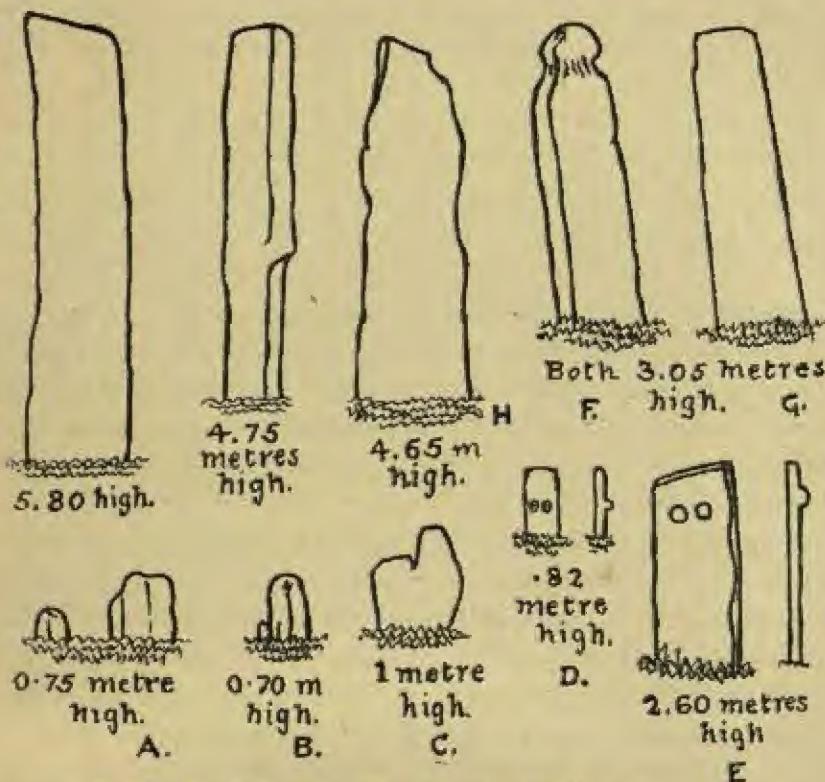
By A. L. LEWIS.

In dealing with this subject I must, in the first place, say that I have no personal knowledge of Madagascar, nor of anything nor anyone connected with it. The details I am about to bring before you are mostly taken from two articles by M. F. M. Barthére, of Tananarive, Madagascar, published in the Bulletins of the Société Préhistorique Française for 1916 (pp. 58 and 517), but, as these are not much read in this country, it has seemed to me that the facts and the inferences to be drawn from them are of sufficient interest and importance to justify their being retailed here, even at second-hand.

There are, in that part of Madagascar known as the plateau of Emyrne, or Imerina, numerous menhirs, which, however, are of no great antiquity ; according to tradition the first of them to be set up were for the commemoration of successes in war ; afterwards the practice was extended to signalizing the foundation of new villages by the king, then the nobility began to erect stones as thank-offerings to the king for favours conferred by him upon them, and finally the people at large devoted them to the cult of the dead by placing a standing stone at the head of their tombs. From being merely commemorative of some particular act or occurrence these stones have become sacred objects and instruments of a cult which is practised even at the present time, especially by women desiring children, or an easy delivery during child-birth, and who, having rubbed the stone with grease, rub themselves against it. When either men or women desire the curing of an illness, or success in some undertaking, they throw fine gravel at the greasy part of the stone, and, if it sticks there, hope for success, or they try to throw a stone so that it lodges on the narrow top of the menhir ; if after this their wishes are gratified they bestow another coat of grease on the stone.

As I have already said, these particular menhirs are comparatively modern, the oldest of them (Fig. 1, A) having been set up in the sixteenth century by Ralambo, who is said to have been king of the Hovas from 1575 to 1610, or thereabouts, to commemorate the capture of a village from another king ; Ralambo stood by it to thank the chief of the village who had betrayed it to him, and who placed the smaller stone by the side of it, in token of submission to and confidence in his new lord ; after that the village was removed by the inhabitants to a more convenient situation,

and another stone (B) was set up by the king then reigning in commemoration of the new foundation. It will be observed that these stones are not only the oldest, but the smallest, of those described by M. Barthére, being only  $2\frac{1}{2}$  feet high.



## MADAGASCAR.

FIG. 1.—OUTLINES OF MENHIRS TRACED FROM PHOTOGRAPHS BY M. BARTHÈRE.

Another stone (H) was set up by another king in the seventeenth century to perpetuate the remembrance of his coronation; on which occasion he sacrificed at the foot of the menhir seven oxen for the people, one of a specially marked kind for the nobility, and another of a notable description for the royal family, and he also instituted a market on the spot.

The first of the kings who aspired to the government of the whole of Madagascar set up a very peculiarly shaped stone (C), saying that the higher part was for him and the lower part for the people, but that they were united in the same block because he did not wish them to separate themselves from him. This is considered a very sacred stone, and animals are sacrificed there, and their blood sprinkled on both parts of the top of it. The sprinkling of blood on stones was also found by Colonel Forbes Leslie to be practised in India; this might be taken to show some direct connection between the two localities, but I do not think it does so; the idea of

sacrificing animals or birds at places marked by special stones might quite well be evolved independently, and the further idea of smearing the stones with the blood of the sacrifices would follow quite naturally.

Near the same village (Ivato) are two other stones (F and G). M. Barthére thinks that the shape of one of them (F) must have some peculiar signification, but has not been able to discover it; this stone, however, is never oiled, that honour being reserved for the other stone (G), which is 100 metres further north.

These menhirs are all thin slabs, and, out of nine, the orientation of which is given, the broad sides of five face nearly east and west, those of two about north-west and south-east, of one north and south, and of another north-east and south-west.

There are some menhirs of a kind which may only be erected by kings and princes of the blood-royal; these bear in relief figures of a female breast (D and E), and are generally placed by the side of a tomb. Of one of these (D) M. Barthére says that the work is so good that it is clear that if the sculptor had desired to carve the whole human figure he could very well have done so, but that he obviously wished only to represent the breasts; this stone is traditionally attributed to Queen Ramorabé, at about the beginning of the eighteenth century, and the workmanship tends to confirm the tradition. This point about the workmanship is important, because, at first sight, these stones remind us of the rude neolithic carvings found in France, which appear to represent a female figure, and in some of which the breasts are the principal feature. In Sardinia, also, a line of small standing stones has been noted, some members of which have breasts carved upon them and others have not; about the object or origin of these nothing is known, but the French stones have been thought to represent a goddess.

According to the old natives consulted by M. Barthére, the underlying idea of the Madagascar stone breasts is quite different: they are merely a symbol. Milk, the food of the newly-born, supports their life and health, and, as the infant requires health and succour from the breast of its mother, so the adult at the foot of the menhir demands protection and assistance from his ancestor. A simple rubbing of the hand on the stone breasts is sufficient on occasions of no great necessity; but if the request be of greater importance, the applicant must apply his lips to the breast and appear to draw nourishment from it.

The fact that these stones with breasts may only be venerated by members of the family of the dead, who are always of royal or noble blood, causes more power to be attributed to them than to the ordinary menhirs, which are at the service of the people in general; but the latter, desiring to follow the example of their superiors, seek and make use of stones which happen to have natural protuberances resembling breasts. The best specimen of these naturally formed stones is supported on two others, and has eighteen or twenty breasts of different sizes on its under side; these and the upper face of the stone are all kept well greased, and passers-by, after applying the grease, throw little pebbles into a deep and narrow hole between the supporting

stones. The cult of these natural stones, being practised by the people at large, still flourishes, but that of the artificially breasted ones has nearly died out, because the only families entitled to use them are almost extinct.

With regard to some other menhirs, forming alignments on the tops of certain mountains, the belief is that they commemorate the deaths of army officers of a certain rank, or the boundaries of territories as settled by the kings of Emyrna after fortunate campaigns. Concerning these, however, Mr. Sibree (*A Naturalist in Madagascar*, p. 116) says: "Other noticeable objects, when travelling about the central provinces, are tall stones of rough undressed granite, from 8 to 12 feet high, called *Vdtoldhy*, or male stones, which have been erected in memory of some bygone worthy, or of some notable event, now forgotten, and which often crown the top of prominent hills. They are also sometimes memorials of those who went away to the wars of olden times, and who never returned to their homes. In these cases a square of small stones—at least three sides of one—is formed as part of the memorial, as a kind of pseudo-tomb; these little enclosures are from 8 to 10 feet square. Some have supposed from the name of these memorials that we have here a relic of phallic worship."

According to M. Barthére, the long sides of the oblong houses of the Hovas before the French occupation were always set north and south, with a door and window at the west: the north-east corner was consecrated to the ancestors, and the north was the most honourable side of the hearth. Mr. Sibree (p. 95) points out that this arrangement of the house enabled it to answer the purpose of a sundial to some extent, certain periods of the day being distinguished by the part of the house or its contents lit up by the sun from time to time.

Dr. Baudouin, commenting upon this part of M. Barthére's communication, says that as Madagascar is in the southern hemisphere, the north there corresponds, from a religious point of view, with the south in neolithic France, which proves that he was right in insisting that the mid-day sun in the first instance played a very considerable rôle, which during the last 9000 years has gradually been forgotten in Europe, but kept up in Madagascar, where the neolithic period lasted at least as lately as our Middle Age; in his view the traditions connecting these stones with the Hova kings are of no value: the stones are of different and distant periods, as shown by their different bearings, and are only statues of the sun already anthropomorphised. Although I think it right to state Dr. Baudouin's views, I may say that as regards the age of these particular monuments I do not agree with them; M. Barthére is living in Madagascar and has been at great pains to get all the information about the stones that can be got from the few old men who have preserved the traditions of their villages, which are entirely forgotten by the modern Hovas. It does not seem to me likely that stones so small as the oldest of those described by M. Barthére would have been preserved for a much greater period than that assigned to them by him.

There are in my opinion two points of particular interest about these menhirs. Firstly, although the special feature of the breasted stones so closely resembles that of some of the French sculptures that at first sight anyone would say that there must have been some connection between them, a consideration of those parts of the French carvings which do not exist on the Madagascar stones shows that the basal motives of the two are entirely different, and that they have been developed quite independently. Secondly, assuming the dates and circumstances assigned to the stones by M. Barthére to be even approximately correct, they present to us the entire history of the birth, life, and death of a cult connected with them, beginning with the setting up by a king of an insignificant looking slab as a mere memorial, its becoming an object of respect, and then of veneration and even of sacrifice, and having supernatural powers attributed to it; this being followed by the setting up of other and larger stones by the people, and by the gradual falling into disuse of some of the smaller stones, because of the dying out of the families to which they belonged, and of the neglect and loss of the traditions concerning them, and all this within three or four centuries, and apparently untouched by any outside influence.

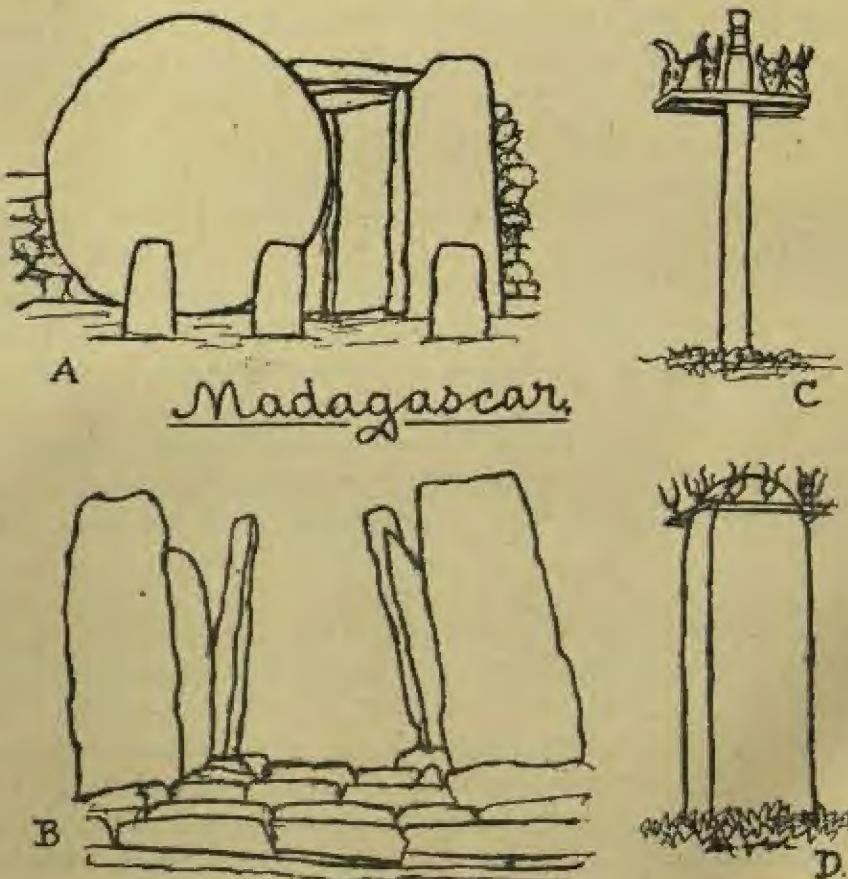


FIG. 2.—OUTLINES TRACED FROM PHOTOGRAPHS BY DR. SIRREE.

This has struck me as being a noteworthy and suggestive lesson as to what may have happened in other places with regard to some of the rude stone monuments.

The stones we have been dealing with so far appear to belong to the Hovas, the dominant tribe. Another tribe, the Betsileo, according to Mr. Sibree, sets up wooden posts with a kind of shelf on which are placed the skulls of oxen killed at a funeral feast (Fig. 2, c); a more modern erection is a well-shaped standing stone, with a light iron frame round the top, to which are fastened iron horns in place of the genuine articles (d). Another tribe visited by Mr. Sibree—the Tanàlas—had no tombs, but buried their dead in a common pit; the only sign he saw of anything like religious observances in their country was an upright stake, with a number of bamboos arranged round it, forming a cone-shaped erection, in front of which several stones were fixed at which heads of cattle and fowls were thrown as expiatory offerings, and children and other blessings were prayed for; he also saw in that country a long flat stone, supported by several smaller ones, forming a sort of altar used for similar offerings.

Another form of megalithic work was seen by Mr. Sibree at some of the older villages. In one case a round stone about 10 feet in diameter was used as a gate, being rolled by levering to close or open the entrance (a). In another case he saw a gateway with stones from ten to twelve feet high, and megalithic stairs leading up to it (b); this does not seem to have had a rolling stone, so it might just as well be at Grimsound on Dartmoor as in Madagascar; it may indeed have been constructed by the Vazimba, an earlier neolithic people, whose spear-points are said to have been made of baked clay, and who were conquered by the Hovas, who had iron weapons. In Madagascar, then, as well as in Britain and elsewhere, we find megalithic building used in different localities and by different tribes in quite different ways; these gateways are just as megalithic as Stonehenge or Avebury. It is not the construction of dolmens or circles only that constitutes megalithic building, it is the use of large stones without cementing material, and without regard to the manner or object of their use, and this might and probably did occur independently in many different places, for whenever and wherever men took to piling stones together to form a shelter or defence they would find, sooner or later, that the largest stones they could contrive to move and set up were the most useful and permanent; but of course the means of transportation and erection would not be equal in all localities, nor would the ingenuity necessary to make use of them always be forthcoming in equal measure in all places and at all times, so that differences in development would occur naturally.

The introduction of mortar or cement was, I think, the first great step from megalithic to modern architecture, and that might possibly have originated in one place only, and spread therefrom in various directions. Is there, for instance, any evidence of its use in Great Britain before the Roman occupation; or of its use in Ireland until, after the retirement of the Roman power from Britain, a number of

refugees had been driven from it to the sister island by the advent of Teutonic "Kultur"?<sup>1</sup>

I do not know of any such evidence.

Since the above paper was read before the Institute two long and important articles on the "Religion of the Malagaches," by MM. A. and G. Granddidier, have appeared in *L'Anthropologie*, January–April and May–June, 1917, from which it seems that religious sites, customs, and ceremonies vary greatly in different parts of the island. The following are points of special interest:—A low stone table on four pillars, to receive offerings and sacrifices, such as is set up in a house in the north-east corner sacred to the ancestors, may also be found in the open air in all parts of the island except Imerina. In the north of Madagascar a circle of stones where sacrifices are offered is found in the centres of the villages. Stones are only set up in the north-east and centre of the island; a king having been inaugurated at one of them, his successors would be inaugurated at the same, and it would ultimately be said that they reigned by the grace of the stone. In the north and east of the island, menhirs, five and six metres high, commemorate the illustrious or wealthy dead, or an event important to some family; there the people deposit offerings for the manes of their ancestors, and pray to them on serious occasions, but if their prayers are not granted they reproach the stone and beat it; the stones, however, are not divinities, but merely permanent and durable witnesses of events interesting to the nation, or to a family.

<sup>1</sup> "A.D. 492. 'Ella and Assa besieged a town called Andreds-ester, and slew all its inhabitants, both small and great, leaving not a single soul alive.'" *Ethelred's Chronicle*, Bohn's edition. The town in question would appear to have been Anderida or Pevensey.

## MISCELLANEA.

### PROCEEDINGS OF THE ROYAL ANTHROPOLOGICAL INSTITUTE, 1917.

*January 23rd, 1917.*

Annual General Meeting. (See p. 1.)

*February 27th, 1917.*

Ordinary Meeting. Professor A. KEITH, Past President, in the chair.

The minutes of the last meeting were read and confirmed.

The election of the Rev. T. H. Darlow as an Ordinary Fellow of the Institute was announced.

Major A. J. O'BRIEN, C.I.E., read a paper on "The Criminal in the Western Punjab."

The paper was discussed by Professor KEITH, Miss M. E. DURHAM, Mrs. SCORESBY ROUTLEDGE, Mr. SEFTON JONES, and Mr. M. S. LEIGH.

The best thanks of the meeting were conveyed to Major O'BRIEN for his interesting paper, and the Institute adjourned till March 13th.

*March 13th, 1917.*

Ordinary Meeting (Joint Meeting with the Prehistoric Society of East Anglia).

The afternoon programme was provided by the Prehistoric Society of East Anglia, when the following papers were read :—

Dr. A. E. PEEKE, Presidential Address.

Mr. REGINALD SMITH, "Plateau Deposits and Implements."

Mr. J. REID MOIR, "The Position of Prehistoric Research in England."

Numerous specimens were exhibited, and some slides and maps were shown.

At the evening meeting, Sir C. HERCULES READ, President of the Institute, gave an address on "Some Prehistoric Questions."

Mr. A. L. LEWIS read a paper on "The Menhirs of Madagascar," illustrated with lantern slides.

The paper was discussed by the PRESIDENT, who thanked Mr. LEWIS in the name of the meeting for his interesting paper.

Mr. H. N. HAWARD showed slides and specimens bearing upon the origin of rostro-carinate flints. The paper was discussed by Mr. KENNARD, Mr. W. B. PEEKE, and the PRESIDENT.

The thanks of the meeting were conveyed to Mr. HAWARD for his interesting demonstration.

The Institute then adjourned until March 27th.

*March 27th, 1917.*

Ordinary Meeting. Sir C. HERCULES READ, President, in the chair.

The minutes of the last meeting were read and confirmed.

The election of the Rev. J. R. Fell as an Ordinary Fellow of the Institute was announced.

Miss M. E. DURHAM read a paper on "South Slav Customs and Beliefs, as illustrated in old Ballads and in Tales by Serb authors."

The paper was discussed by the PRESIDENT, Sir HENRY HOWORTH, Major O'BRIEN, Mr. LONGWORTH DAMES, Mr. SEFTON JONES, and Miss DURHAM replied.

On the motion of the PRESIDENT the hearty and grateful thanks of the meeting were given to Miss DURHAM for her instructive and fascinating paper and for the exhibition of her excellent water-colour pictures.

The Institute then adjourned till May 1st.

*May 1st, 1917.*

Ordinary Meeting. Mr. A. L. LEWIS, on the motion of Dr. GLADSTONE, in the chair.

The minutes of the last meeting were read and confirmed.

The election of the following as Ordinary Fellows of the Institute was announced: Captain R. Strickland Cholmeley, Mrs. G. C. Wood-Jones, Miss M. Murphy, Mr. H. D. Skinner.

Mr. J. REID MOIR read his paper "On Some Human and Animal Bones, Flint Implements, etc., discovered in Two Ancient Occupation-Levels in a Small Valley near Ipswich."

The paper was illustrated by numerous specimens and lantern illustrations.

The paper was discussed by Mr. REGINALD SMITH, Mr. BURY, Mr. PARKYN, and Mr. LEWIS, and Mr. REID MOIR replied.

The hearty thanks of the meeting were conveyed to Mr. REID MOIR for his important paper, and the Institute adjourned until May 22nd.

*May 22nd, 1917.*

Ordinary Meeting. Sir C. HERCULES READ, President, in the chair.

The minutes of the last meeting were read and confirmed.

Captain F. R. BARTON read his paper on "Tattooing in South-Eastern New Guinea," illustrated by lantern slides.

The paper was discussed by Dr. SELIGMAN, Mr. H. S. RAY, Dr. HARRY CAMPBELL, Mr. SCORESBY ROUTLEDGE, and the PRESIDENT. Captain BARTON answered numerous questions.

The hearty thanks of the meeting were accorded to Captain BARTON for his interesting paper, and the Institute adjourned until June 5th.

*June 5th, 1917.*

Ordinary Meeting. Sir C. HERCULES READ, President, in the chair.

The minutes of the last meeting were read and confirmed.

Professor W. M. F. PETRIE read his paper on "Links of North and South."

The paper was discussed by Mr. PEAKE, Mr. A. L. LEWIS, and the PRESIDENT, and Professor PETRIE replied.

The best thanks of the meeting were accorded to Professor PETRIE for his very interesting and suggestive address.

The Institute then adjourned until the Autumn.

*November 20th, 1917.*

Ordinary Meeting. Sir C. HERCULES READ, President, in the chair.

The minutes of the last meeting were read and confirmed.

The election of the following as Ordinary Fellows of the Institute was announced :  
Mr. E. S. Beoku Betts and Miss Margaret Lyle.

Miss M. A. MURRAY read her paper on "Witch Sacrifices."

The paper was discussed by Mr. CARVETH READ, Dr. HARRY CAMPBELL, Mr. SEFTON JONES, Miss WERNER, Dr. SELIGMAN, Mr. GRANT BROWN, Lieutenant HAMBLY, and the PRESIDENT, and Miss MURRAY, in replying, answered numerous questions.

The best thanks of the meeting were accorded to Miss MURRAY for her very interesting paper.



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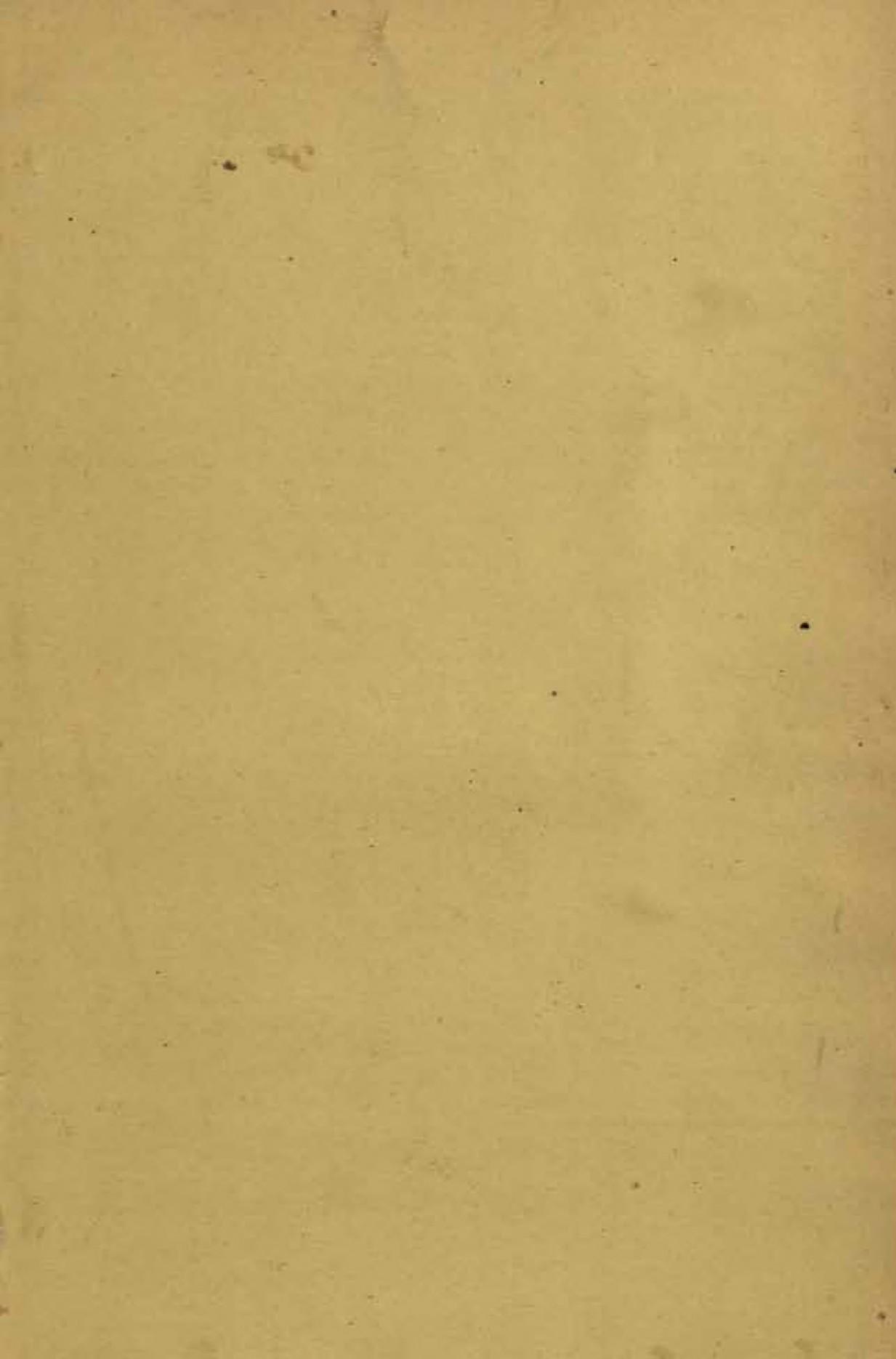
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